

**Guide to Electronic Bulletin Boards and The Internet** 

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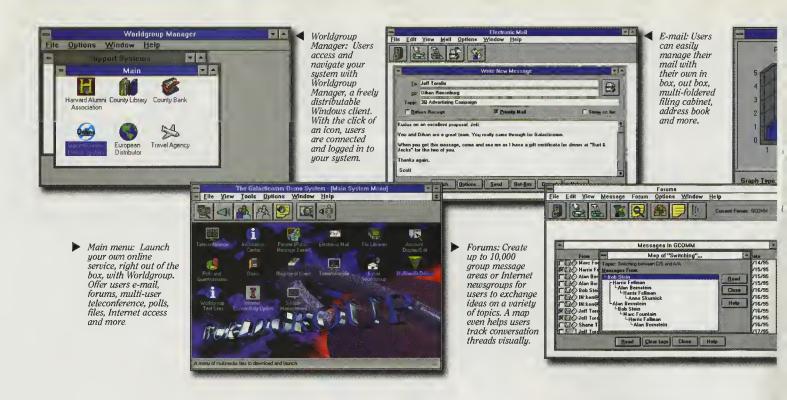
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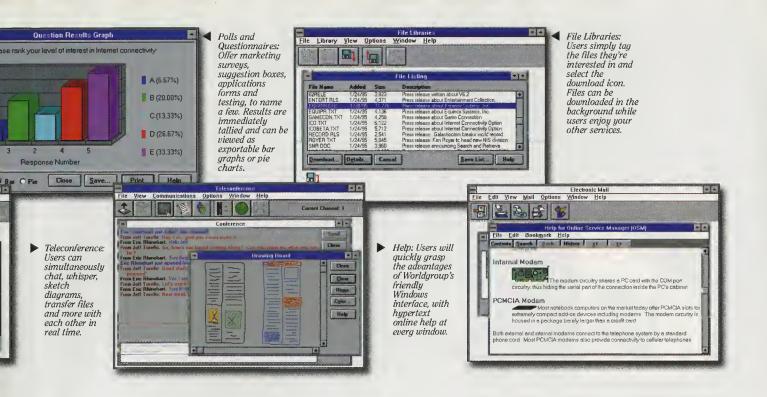
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# EDITOR'S NOTES

#### **BOARDWATCH - A HUNDRED TIMES OVER**

This issue marks the 100th trip we've made to the printing house with our little box of stuff, ever hopeful that they will produce some reasonably close facsimile of it in something close to the quantity we had asked for — another issue of Boardwatch Magazine.

Our first issue appeared in March, 1987. It was a printed publication mailed first class. There was no electronic version of Boardwatch available until January 1988. And in 1988 we were the ONLY print publication I knew of then that was also distributed online in full text version. It was printed on an Epson MX-80 dotmatrix printer and written on an 8 Mhz Phoenix XT computer with a monochrome screen and 1 MB of RAM. It was funded with \$80 of venture capital I raised by digging around in my left pants pocket.

The first issue included a story on the topic of TIME and how to get the correct time from the National Bureau of Standards at (303)499-7111 (still in operation). It had a story on the call-waiting feature and how to turn it off so an incoming call didn't botch your 300 bps file transfer. It announced a U.S. Robotics sysop discount price of \$495 on their proprietary Courier HST 9600 bps modem - which then carried a list price of \$995. This was considered such a good deal that FidoNet was virtually taken over by U.S. Robotics that year. We talked about line surge protectors, a typesetting service that would allow you to transmit files to them by modem for printout on a very high resolution 300 dpi LASER printer. We did stories on three local bulletin boards, the Cleveland Free-Net, the

Colorado Alliance of Research Libraries (still one of the best at telnet://pac.carl.org), a system operated by the Society for Technical Communications, a SoftLogic Solutions product support BBS, a free job-search employment BBS. We reviewed the ADC Telephone Modem, a 1200 bps powerhouse at a very attractive \$119, ProComm Version 2.4.2 terminal software. We

reviewed three shareware utilities including System Enhancement Associates ARC51. In those days .ARC files were universal and no one had heard of .ZIP files yet.

We also did a story on how to trick your 300 baud modem into doing 450 baud by entering a few keyboard commands. And we did a tutorial on how the XMODEM file transfer protocol

#### DENVER PC BOARDWATCH

NEWSLETTER FOR DENVER AREA ELECTRONIC BULLETIN BOARD SYSTEMS

Editor: Jack Rickard

March 1, 1987

#### BITS

TIME: Need the correct time to set your system clock? National Bureau of Standards radio station WWV maintains a free telephone time service at 499-7111. They announce Universal Coordinated Time with tone each minute. If you don't want to wait a full minute, the Naval Observatory Time Service provides Universal Time and Eastern Standard Time alternately each five seconds with tone from the U.S. Naval Observatory master clock. This is the official time base for the United States - available at (980)410-8463. (\$0.50 charge per call). Local time and temperature are always available from TV Channel 4's service at 837-4467.

CALL WAITING: The CALL WAITING feature allows you to detect incoming telephone calls by way of a discreet "click" in the earpiece when an incoming call is on line. Unfortunately, this click murders file transfers made via modem. Fortunately, you can disable call waiting using either of two methods. In many areas you can disable it for the duration of a single call by entering e70 (touch tone) or 1170 (rotary dial) before the desired number. This disables call waiting only until the current call is completed. For multiple call protection, use the CALL FORWARD feature to forward all calls to another number. Although this causes the phone to ring sharply once, it apparently doesn't interrupt modem file transfers.

US ROBOTICS MODEMS: US Robotics is offering qualified BBS sysops a discount price of \$495 on its new 9600 baud Courier HST model - normally priced at \$995.
Additionally, sysops can get a \$300 discount on the company's Courier 2400e, Courier 2400, and Microlink 2400 models. US Robotics can be reached via modem at (312) 982-5092.

COMMODORE PC: Commodore
Business Machines Inc. has
announced two PC compatible MS-DOS
computers. The \$999 PC10-1
features 512K bytes RAM, 1 360K
disk drive and an ATI Graphics
Solutions video card supporting
CGA, Monochrome, Hercules
Graphics, and Plantronics modes.
The \$1199 PC10-2 adds a second
disk drive and provides a full
640K RAM. Commodore Business
Machines, 1200 Wilson Dr., West
Chester, PA 19380 (215) 431-9100

LINE SURGE PROTECTOR: Curtiss Manufacturing Co. has announced a \$19.95 phone line surge protector that plugs into a 3-prong AC outlet. Two modular connectors allow line surges to shunt to AC ground. Curtiss Manufacturing Co. 305 Union St. Peterborough, NH 03458. (603)924-3823.

TYPESETTING: Transmit text files to Intergraphics typesetting service over toll free telephone lines. Same day service - MC/Visa. Info (800)368-3342.

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worked - virtually byte by byte. We also listed 161 electronic bulletin boards operating in the Denver area each dialed up and confirmed by yours truly.

In the interim between that issue and this, our 100th, much has changed. And much has remained the same. The technology has improved immensely. We never did really become a magazine in the traditional sense. Magazines rather became us. Our format improved precisely as the tools to improve became available and operated on a personal computer. As Windows came on the scene and programs like Ventura Publisher, Pagemaker, QuarkXpress, and Adobe Photoshop became useful, we added color, better layout, etc. Today almost all magazines are produced this way. We were never produced any other way and we were always anxious for the next broken beta version of whatever program was available at the time. If we couldn't do color yet, we didn't do color. Personal computer technology has been very kind to writers and publishers. And it has made it possible for many to publish

where it was not economically feasible to do so before. If we had had to rely on conventional graphics and typesetting to produce Boardwatch, there never would have been one. Similarly, many many publications have arisen in this new era of publishing technology, serving small audiences around a specific specialty.

The online technology is really quite related. And it has matured as well. It is now conceivable to have successful electronic-only publications that can economically serve very small groups. This extends the trend toward "micropublishing" almost infinitely toward the bottom. A magazine successfully serving 300 readers is not out of the question. And again, we have matured from ASCII plain text characters to today's HTML/SGML on the World Wide Web allowing graphic images, tables, text, and a very pleasing display. In fact, I would look for electronic mail to incorporate HTML here very shortly, or alternatively, for World Wide Web browsers to incorporate electronic mail. Either way, delivery of web pages by e-mail is coming. And it is possible at this

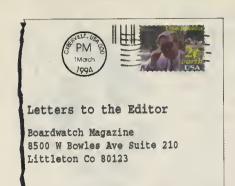
point for a single individual with a PC and modem to "publish" on the Internet and reach global audience. You could probably get started for \$80.



But in looking back, the changes are not so profound in an overall sense. Much is the same. There is simply more of it. More people online. In our first issue, we estimated 3000 calls per day in the state of Colorado to 161 bulletin boards representing a total caller base of about 10,000. Today, 3000 calls per day is one largish bulletin board somewhere. There are more graphics, more callers, more services, and just more online. But the legal problems, the software developments, the social issues, have changed little. The online community still needs that "focal point for information and news of interest to system operators and users" we talked about in our very first editorial. We've tried to fill that bill. And after 100 attempts, I'm not displeased with our efforts. With regards to accurately reflecting a picture of the online industry as it is, and with regards to pointing toward developments that will affect its future, I can in all modesty say that none does it better than Boardwatch. We have more writers now, more stories, and there is a lot more happening online. But our original vision of a print publication serving an online community seems remarkably on target -100 issues later.

For the many readers who have been with us over the years, some loyally from the very first few years, my personal thanks for your support, ideas, and input along the way. We celebrate with you the flowering of a small, obscure hobby into the very mainstream communications medium you envisioned then. We watched you make it happen. And we endeavored to allow the rest of the world watch as well. With your continued support and participation, we'd like to take a whack at another hundred issues of Boardwatch Magazine.

Jack Rickard **Editor Rotundus** 



#### CIX

Your editorial on the Internet's history etc., was most informative and interesting.

However, I noticed one thing by its absence. You never even mentioned CIX. (I know you have on other occasions). Is this a suggestion that CIX has gone the way of the DODO bird? That it does not have any role to play in the supply of Internet connections?

I would appreciate anything you can add to this question.

Thanks.

Robin Rugg Robin\_rugg@together.org - via BulkRate 2.0

Robin:

I thought I had mentioned it in the settlements discussion. I think CIX has been struggling for relevancy since the debacle last autumn. From what I understand, their primary mission is to find ways to create a "good ol' boys" club to restrict the number of Internet Access Providers at the top of the hierarchy. And if what I'm hearing from readers about NAP access and the marketing gurus at PacBell and Sprint is true, they may have AGAIN figured out a way to own the water well and charge by the dipper. At this point, they are all off in Hawaii discussing the matter over Mai Tai's and the result isn't too clear. I think that about the time they develop a plan for shutting everyone out who's out, Internet access will be sufficiently ubiquitous that it won't matter - again. From what I understand, the new plan calls for "transit" fees - which are settlements under another name. Since the ONE thing CIX ever did in its otherwise somnolent existence was establish a concept of NO settlements, that it would reverse that is again breathtaking.

I would regard our omission of detailed discussion of CIX in the context of the Internet as either incompetence on our part, or irrelevance on their part. I guess we'll see which is which in coming months.

Jack Rickard

#### **MAY 1995 EDITORIAL**

I recently read your editorial in the May 1995 issue of Boardwatch. You mentioned

## LETTERS TO THE EDITOR

Address correspondence to Letters to the Editor, Boardwatch Magazine, 8500 West Bowles Ave., Suite 210, Littleton, CO 80123; by fax to (303)973-3731 or by e-mail to letters@boardwatch.com

that Microsoft had bought UUNET. As an employee of UUNET, I was very surprised to read this because as far as I knew, Microsoft has only bought a minority share of us. We are still an independent company.

And speaking of Internet providers going public, we went public ourselves two weeks ago.

I highly doubt that Microsoft will buy us any time soon. Given all of the flak it received when it tried to buy Inuit, I think MS would be in bigger trouble. Its competitors would all be screaming that Microsoft would then completely take over the Internet.

I didn't mean to nitpick, but I wouldn't want people to think that we were now a part of Microsoft.

Rpark@uunet.uu.net

Well and good enough Rpark. I think the actual context was that a lot of deals between large and small companies were going down—some of it on questionable economic reasoning. If we implied that Microsoft had bought UUNET outright, we thank you for correcting the record.

Jack Rickard

#### **UP ON THE FARM**

Jack, I can't remember when you said it but something you said about people needing to take responsibility to get internet in their areas clicked with me. I live 12 miles from a town of 886 people in N. Missouri. When I moved out here I knew there was no internet locally. I put in an fx (foreign exchange) line which allowed me to dial up to KC. When I first did that in 1993 there was no actual slip providers in KC. I was paying nearly \$200/month just to get access to my Delphi account. Anyway, I got involved in teaching internet as a volunteer to the local schools and the local telephone co-op was involved also. Next thing I knew they were interested in Internet. I am proud to tell you that as you read this letter 8000 square miles of N.Missouri is getting affordable local dialup internet, slip accounts no less. From my 240 acre farm I have a local dialup for \$30/month.

The group of telephone co-ops understood immediately how important the Internet could be for our local people, schools, libraries. Just like they did at the turn of the century, they are 'stringing up lines' in areas where people then said "Why are they doing that? It will never work." Today it is a very rare farm that doesn't have a telephone and many of us have fax machines and even data lines. Anyway, just like my late great-uncle Mike who helped string the lines for this area, I've helped do it for Internet.

To every person who says "It isn't possible to get Internet economically in my area because..." I say be creative, get off of your rear-side and help. It does happen. From my farm I now have the privilege of running the DIVORCE HOMEPAGE - http://www.primenet.com/~dean/ - where in the month of May 1995 4700 people stopped by to learn about help available via the links.

I run a divorce support board on Delphi, custom forum 56. Each day I interact with many,many people in the world and it is very satisfying. Anyway, for every person in the 8,000 square miles of N. Missouri, thanks for your part in motivating this farm boy in Missouri. I stand ready to help others figure out how to do it.

Dean Hughson dean@primenet.com tel 816-484-3481

Dean:

Very pleased to learn of a success story on the topic of extending Internet access to rural areas. I remain convinced it will be individuals such as yourself who accomplish this mission, while the ever philanthropic larger organizations pass it by.

Jack Rickard

Dear Jack:

The May issue of *Boardwatch* was up to its usual high standards. Here are some rambling thoughts on the articles and letters.

1. In your editorial ("Ring That Bell"), you talked about the major advance made when independent service providers finally allowed Internet e-mail to flow into and out of their systems. My own pet rock is wanting the same thing to happen with on-line discussion groups, to make them as accessible as the Internet newsgroups. I don't want to have to subscribe to Genie to follow BMW (Motorcycle) Owners of America discussions, and CompuServe to get BMW Riders

Association discussions, when I already subscribe to AOL for the things it provides. The problem right now is that groups that don't own an Internet host find a commercial service the easiest way to get a discussion group going, but each service keeps those groups in-house. We need to break out of that box.

- 2. Your reply to Tomb@america.com left out what I think is one of the strongest arguments against the RBOCs' monopoly. From Norfolk VA, I can make an international call to Richmond UK for 2 cents a minute on the least-regulated system (Internet); and an interstate call to Richmond WA for 10 cents a minute on a competetive, somewhat regulated system (Long Distance); but it costs me 20 cents a minute to make an intrastate call to Richmond VA using the non-competetive RBOC (BellAtlantic). This is supposed to be good for me? C'mon, Tomb, let \_me\_decide.
- 3. I agree with Dean Brown about the privacy issue. But here's my take. If you offer me a service for free, you have the right to ask me whatever you want. I have the option to decline to use your BBS if your request is invasive. However, if I'm paying real money for your service, you don't have that right - other than to ensure that I'm over 18, or whatever laws may apply. If you want personal information like my exact age, sex, etc., you can pay me for them, just as I'm paying you for the information you provide. The problem comes when I'm trying to find out whether your BBS has the sort of information and environment I'm looking for. Most operators allow limited access for "free," but require that I give up a lot of personal information to do so; that information stays in their files when I later pay for the service. Net result: it's certainly kept me from a) being honest, and b) using BBSs that I might otherwise have logged into. OK, soI'm a privacy weirdo. I use a mail drop rather than my home address. And I've driven away from places like JiffyLube, which must have your entire personal history before they'll deign to change your oil ("The computer requires that information before we can serve you, sir").
- 4. Besides, there's no reason for you, of all people, to ask personal questions of your subscribers, when you can already read our minds. Mine at least. Your article describing the Boardwatch Web Server was just right. It answered the questions I had been thinking about for the past couple of months, and provided lots of good, practical information. Thanks.
- 5. Your comments about First Virtual reflect my skittishness about that company. I ran into them because of a page on the Web calling for support to a Phil Zimmerman defense fund. Only catch was that you had to make your contribution in First Virtual's money. There was no information about the people responsible for the fund, nor any way to contribute with a check. Presto! Instant First Virtual customers. I demurred, despite my strong feelings about the need to support Zimmerman. (There seem to be a lot of "Free Phil" funds. Which ones are legit?)
- 6. Not surprisingly, David Hakala's list of on-line newspapers was incomplete; it's hard to keep up with these things. My local

Internet provider (Infi.Net) has been providing mid-Atlantic regional papers on-line for a while now, and just inked a deal with Knight-Ridder to greatly expand the offerings. Try http://www.infi.net for a look.

7. Finally, Boardwatch is now arriving regularly, thanks to the kind efforts of Patti Burnett. My impression is that your magazine is full of good people like Patti, who keep you from going bankrupt so you can pretty much do what you want and take all the glory. Give 'em all a big raise. Now.

Sincerely,

Jim Wilson DumboFlies@aol.com Norfolk, VA

Jim:

On the topic of universal shared access to discussion forums, I guess I disagree though admittedly it has an allure. We do have such forums, USENET newsgroups. I find USENET fascinating and useful, but I wouldn't want the whole online world to devolve to USENET. It is one type of community, and it is an interesting one in that no one moderates it generally speaking. Anything goes.

But I think there is a place for a wide variety of "communities" of differing characteristics. Those characteristics are a function of who runs them, how well or poorly they run them, and under what operating theory they run them. I guess I think a motorcycle forum should not only differ in topic, but also in tone and the culture of the motorcycle forum itself. A one-size-fits-all ruling on how disruptive elements are dealt with, what is acceptable and what not, and so forth doesn't seem right. If we broadband all communities across the entire online landscape, I fear that's what we'll have. I've expressed some concern on this topic. Our legal system seems bent on defining what conferences can and can't do, and flattening the diverse strata available into a universal USENET. I would hope not.

On privacy, I do tend toward a libertarian philosophy, but probably do not fall into the realm of the truly privacy-concerned. I don't think you have any "right" to any level of privacy when you connect to any particular online service. They will want to know something about you, and what they will want to know will vary greatly from service to service. Some are very open to new users without much in the way of query. Some want to know everything about you and indeed about all the generations that spawned you.

But you get to control how much you divulge, and whether you're even comfortable being there if they are too nosey. It's the marketplace at work. If they want too much, and offer too little, you'll just go away. It almost makes me teary-eyed to think of the strikingly harsh spartan beauty of such a system. It's almost pathologically rational. The winners will win, and the losers will lose, and in winning and losing they absolutely and without question define what winning and losing look like.

I'm not really skittish about First Virtual. But it's a new and experimental type of system and as such is open to question and examination - part of the process.

Your impression that our magazine staff is full of good people like Patti, who keep me from going bankrupt so I can pretty much do what I want and take all the glory, is actually remarkably accurate. It is so. But I doubt a big raise would have much effect. They generally do it for the profoundly moving experience of serving the public and contributing to the Boardwatch mission, to the greater good of all online, as highly valued members of a crack technical team dedicated to full systems capability and air combat superiority, a vital role in our national defense effort. (err... that may have been something I picked up in a previous career). I'm sure they would simply laugh at me if I offered mere money as some tawdry and cynical token of our esteem. It would be unseemly.

Jack Rickard

#### WEB SERVER @ BOARDWATCH

Wow! Just when I thought I would have to make one more of life's great dicisions, based solely on my own judgment, I read the June Boardwatch article about your own WWW Server. I knew when I looked at the cover that this would be an important issue for me. JUST WHAT THE DOCTOR ORDERED.

Having spent quite some time surfing the Net in places like comp.infosystems.www.\* and worming my through all the detractive detritus searching for subtantive information, (including several \$30 plus books) on how best to set up a WWW server, your article was like, tubular.

I had been looking seriously into Linux and doing it myself from scratch, but it just seemed too much like choosing Betamax (I know, technically it's great format).

After attending the the Spring Internet World (it was local) I realized that if I could just catch the wave right and my surfboard, named The Web Kitty, was strong enough I would soon be riding high. It was apparent that NT would be a strong contender and when I picked up a Beta C copy of O'Reilly & Associates WebSite it only confirmed my suspicions. The groundswell was building.

Your June issue is the only one, in several years of reading Boardwatch, that I turned to a lead article first. I ALWAYS started with Editor's Notes and then the Letter's section.

Soon, The Web Kitty will have recuperated from a crash on the rocks of reality and you will be one of the first to know when my very own WWW Server is up a running.

Thank You! Thank You! Thank You! Did I forget to say Thanks?

Allen Rice ralenr@ix.netcom.com

Hey, we strive for tubular. You're quite welcome and good luck with the Web Kitty project. As it turns out, I guess the topic of doing your own web site is of fair interest to our readers. We'll pursue it.

Jack Rickard

\*\*

Dear Jack,

**JUST SAYING HI!** 

I've been a SysOp for the last 5 years and have enjoyed reading your magazine since I first found it a couple years ago. I, like many, was dissapointed when the publication started to sway away from BBS'ing and toward the Internet. I felt that the SysOp was the last "computer hobbyist." Nobody owns a computer and "actually uses it" just to do it anymore. Of course you have the gamers but, they don't REALLY enjoy the true power of the computer. About 2 months ago, I called to get an account with a local Internet provider and started using it. "WOW!" I quickly asked myself why anyone would ever want to call a BBS with all this at their finger tips? After having access for a week or so, I FTP'ed a Linux distribution and began MY transition to the Internet. I now work for my provider and get a static Slip account as part of my benefits package. I offer Internet service and a "simple" BBS for those not willing to learn the shell. I can see now, that there are "still" a few frontiers for the computer hobbyist and we have a long way to go! Thanks Jack for the great magazine!

Tim Barnby tbarnby@olympia.com

Tim

I understand the transition. We all went through it. But I do think we need to clear the air on a couple of things. I was a BBS hobbyist. I do not view them in a derogatory sense. Not everything in this world is best served with a price tag, and many many talented individuals have contributed software, work, ideas and concepts to the online communications genre very generously and with little recompense.

But the characterization I'm hearing these days tends to cast "hobbyists" as being "left behind." In most respects, hobbyists LEAD trends, rather than following them. The reason for this is very easy to understand. Hobbyists do not have to see how an effort will pay out on the bottom line before investing in it. So they can dabble where others fear to spend.

"MY" hobbyists are innovators, and typically invest anywhere from \$5,000 to \$25,000 or more in something that doesn't generate any significant revenue. They do it because they love it. They were among the first to put online services on PC's. They led the march to higher speed modems and consistently formed the "early adopter" group that bought those modems at each step of development.

They have developed ways to pass message conferences without hogging tons of bandwidth and unlimited disk space provided at taxpayer expense through universities and defense contractors. They did it at night, in compressed form, with efficient protocols, on their own dime, and in as efficient a form as possible.

And almost any of the early pioneers in BBSland that I know of have moved on to the Internet - Tom Jennings, Randy Bush, Adam Hudson, David Dodell, Phil Becker, Bob Hartman - find ANY of the people who developed the tools in BBSland ten years ago and you will find they STILL are involved in communications, but almost to a man in today's version of it - the Internet.

Now in the process of all of this, it became possible for a new generation of BBS operators to come on board using \$25 shareware software on an \$800 computer with a \$200 modem. You can easily run a BBS for \$1,000 now. And it is true that some of these do occasionally develop an interesting theme or presentation and we will probably always follow that in Boardwatch.

But we didn't cause the move to the Internet, we have simply followed it as the natural progression of things to "what's hot this season." And we'll try to accurately reflect it where it lies, and on to whatever drives it NEXT season. In the process, we may pick up a few readers who want a static world where they can buy a BBS package and join in without the large dollar investment and sweat to get seven things that don't want to even be in the same building together to actually work together to do something useful. But they're frankly not my problem. It's not what Boardwatch is about. We are for, about, and interested in the early adopters, the pioneers who are doing things - most of which will fail, or fail for awhile, before becoming useful.

Your experience is very specifically encouraging. We started talking about the Internet and the web just a few months before you discovered it. And now you're there and plowing ahead and apparently agree we were on course. THAT'S OUR JOB!!! What would you want with a magazine that told you what was coming a year AFTER you found out about it? That's an historical archive, and we've no interest in doing one, and you've probably no interest in reading one. It's a tough game, and I fear sometimes I come across as a little acerbic (ok sour), but I truly love it. You truly support it. And you hold the result in your hands (ok, maybe your screen). If we're really lucky, we'll pick up on something and put it in this issue that can really, genuinely assist you in picking your way through the quagmire and make that move that will work for you in your job, your business, or yes, your hobby - or perhaps make your fortune. I've got the greatest job in the

On the other hand, I guess we could print vodka ads and ship them to people who subscribed by entering the Publisher's Clearinghouse sweepstakes...

Jack Rickard

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#### **JUNE 1995 ISSUE**

Dear Jack,

I usually save Dvorak's column for last, rushing instead to get a look at whatever hot new toy you've profiled that month, but the liver recipe sucked me in (how many folks will confess to enjoying liver in a national publication?) and I soon found myself laughing heartily at his report from the San Jose Internet convention. There are a lot of computer magazines out there, and I read a fair number of them, but BOARDWATCH remains one of the few with any personality. Don't ever change!

I do want to alert Mr. Dvorak to a possible error, however. I believe he will find that the hypothetical roller blader (or is that in-line skater?) he had in mind is properly described as "callipygian" rather than "callipygious." I'm sure your readers will forgive him: what a delightful word!

Yours,

Rob Szarka szarka@brazerko.com

Rob:

I'm with you. The liver recipe got me too - a very heart-rending piece.

Jack Rickard

THE BBS SIDE.

Jack.

I wanted to write you really quick to tell you that I enjoy your magazine. It is great to see a magazine that caters to the smaller online services. I do have *one* concern though, and that is that you will not continue....

What I mean by this is that for years I have read your magazine knowing that you where talking about BBS's. Now it is looking as though you are going more and more towards the InterNet, which I think is great and all, but I think that you are going away from what originally attracted me (and others I am sure) to your magazine. I guess I just wanted to hear you tell me that you will never forget the little people trying to give there goods to there local community via a BBS. Being a SysOp for 8 years, it would really hurt to see you convert to much further from the true BBS SysOp....

Have a Great Day, Amn Eric J. Goforth, USAF goforth%sp@mhs.elan.af.mil

Amn Goforth:

I fear you're headed for disappointment. You rather attempt to define my magazine by your definition of what a "true" sysop is. I would differ on both definitions, and at this point, I fear I've been printing Boardwatch somewhat longer than you've been running a BBS. I think the "true" BBS sysop is working furiously on the ULTIMATE World Wide Web

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ernet: ats@ibsabbs.con FidoNet: 1:102/641 page tonight. I'm hoping to sneak in and take a peek while he works, and tell you all about it next issue.

And you, as a veteran sysop of eight years, have the option of leading, of following, or of getting to hell out of the way. But until we make a conscious editorial decision to move into fiction, I cannot alter reality simply to retain you as a reader.

Jack Rickard

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Jack,

For years now I've always turned to Boardwatch when I absolutely had to have specific information (I've run BBSs since the TRS-80 model 1 days, but never commercially, only for business and for organizations).

Now I'm setting up a web server to rent out web space (so look for my advertising contract soon!).

I bought your June issue last night because I ABSOLUTELY had to have some sources for ISDN hardware. You didn't let me down. I got all the information I needed by page 28! And I also got your article on your own web server! Excellent!

I'll call in my subscription today at the 800 number (I don't like putting credit card info on the net); I don't know why I didn't do it years ago. You've been there for me in every issue I've ever bought!

I notice Jim Warren is one of your contributors; say hello to him for me if/when you get a chance. He should remember me from the West Coast Computer Faire days and the Homebrew club.

I tried your web page, and my server is still trying to connect even as I write this entire email. I use Netscape 1.0, and no other server page has given me trouble. It's about 7:30 am my time, about 5:30 am your time; are you down in the morning for maintenance.

I'm going to decide this weekend between Windows NT (server or workstation; I've gotten both for testing) and unix (either BSDI or Linux, BSDI because my access provider uses it and Linux because the price sure is right:-)). I wanted to see what you've done under Windows NT.

When I http to your page, I get a "received 1046 bytes of 1046 bytes" but the screen stays blank and the Stop sign stays red. When I click on the stop sign I get a short page that says:

>>>>

Welcome Subscriptions Boardwatch Online Virtual Office

Information About ONE BBSCON August 16-20, Tampa Florida

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and nothing else. When I click on the "information" line I get it fine; as you know it's a link to another server.

But when I click on the "welcome" line I get only a line at the bottom that says "Connect Host contacted. Waiting for reply..." I've gotten it for over ten minutes; so I think you may have a problem.

Please check for me. I check for email several times a day at "jlasman@jaxnet.com", so if someone wants to email me back, that's great. Or possibly fax me at (904) 730-0284 or voice call me at (904) 730-0928.

Thanks again for having the best publication to turn to when you absolutely positively have to have the information NOW!

Sincerely,

Jeff Lasman, President ClasCom Corporation Jlasman@jaxnet.com (soon to have our own domain at "clasys.net".

Jeff:

I'm extremely pleased to hear that we have hit the mark at your end. Many years ago, when Bill Machrone was editor of PC Magazine, I recall several issues where EXACTLY what I needed showed up in the current issue of that publication as if by magic. I didn't know how they knew that this month I really had to get a printer, scanner, or whatever, but there they would be with the roundup. But they did. I no longer find them this way, and I'm not certain if it is PC Magazine that changed or me, but in any event it's no longer a match.

But I do think that's the value in magazines they can be current. At this point, it rather feels like publishing a book each month. We do a couple of things to try to make Boardwatch reflect what is actually happening online. The one that causes me the greatest heat is that we simply don't have an "editorial calendar." Most publications map out what the major stories will be for the entire year, and use these to entice advertisers to get in with the stories that are about them. At Boardwatch, we have scrapped stories and added a new cover and an entirely new take three days before going to press. The second element is that we just don't have the same lead time most publications do. On July 25th I'm still writing on your September issue. The short lead time and no editorial calendar policy causes horrendous inconvenience. But my hope is that it causes not only an accurate reflection of what's hot NOW online, but a timely one as well. In some sense, we do have to compete with a world of almost instant electronic information at some level.

As to the web site connection, we get at least one call per day from someone noting that the "Internet is down" or the "Internet is broken" and usually NOT with reference to our specific connection. In reinventing the phone company up from the grass roots, I think you'll find this "new" telephone system is not as stable and reliable as the previous one. Those accustomed to BBS dialup connections really have a hard time with this as their connection to a service may be quite fast one minute, and drop to a crawl the next. We're seeing a lot of domain name lookup problems almost everywhere and some software requires a reverse lookup to serve you. Too often, this still depends on someone in a back room in Fort Worth clawing in the correct spelling of a domain name etc. In fact, we've come to refer to this anonymous someone as "Claw."

Finally, with regards to needing it NOW, my experience has been that many of our readers need it NOW, but we published it four months ago. Please do try the keyword search feature of our World Wide Web site. We have the issues October 1994 through July 1995 up online NOW in absolutely full text with all graphics and indexed with O'Reilly's remarkable WebIndex program so that you can search the entire set in just a few seconds by keyword.

Thanks for the subscription. We need you.

Jack Rickard

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Dear Mr. Rickard:

I wish our legislators and judges had your grasp of the issues/problems involved concerning our freedom of expression on this new way to communicate. I agree with your July editorial 100%.

I also agree with your (Letters to the Editor) reply to that religion that thinks they can create a pocket of dictatorship within our borders. As you said, most of us would never have heard about them but then they bring enormous weight to bear on someone who criticizes them. We are all made aware of the group and we wonder what can be so wrong with them that a criticism has to be covered up. Your ability to clarify issues is fantastic but then that is why you are an editor and most of us aren't.

But your great writing in July's "Webwatch" was over my head. I just could not understand where or how or why Procomm and Netscape would work with each other. Which do I use to call what and which do I switch to when? I use Procomm to call our Internet Service Provider for pine e-mail and for local BBS's. A co-worker read "Webwatch" and told me I should:

- 1. Get a full SLIP or PPP Internet account.
- 2. Get a copy of Netscape and install it on my PC.
- 3. Open Procomm under Windows and then minimize it.
- 4. Open Netscape and call the Internet to get all of Netscape's Internet abilities.
- 5. When I am in the "cloud" called the Internet and if I want to call a BBS from within the Internet I can activate Procomm and use Procomm's abilities to (call and\*) use a distant BBS that has a connection to the Internet cloud.

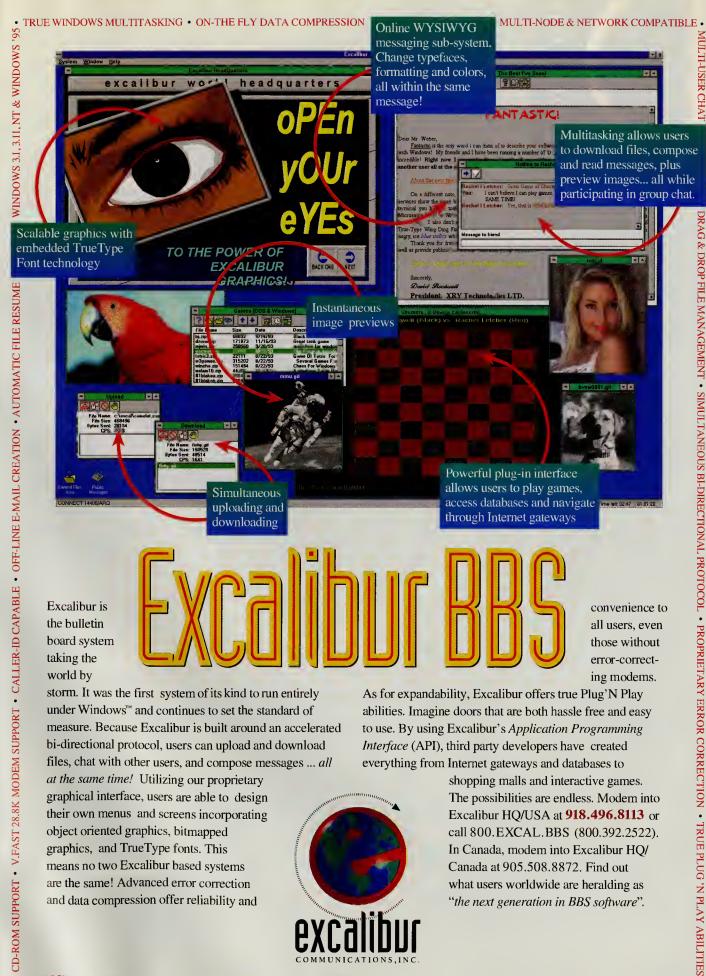
Have we got it? \*I'm still not sure of the calling the distant BBS part.

Very truly yours,

Mr. Lynn Ellsworth lellswor@transit.nyser.net

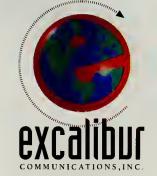
Mr. Ellsworth:

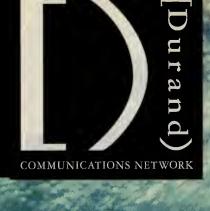
A very understandable question and I wish we had clarified this a bit more. This is what I refer to as "optical comprehension." Much of what I have learned technically I didn't really comprehend until I "saw" the wires get



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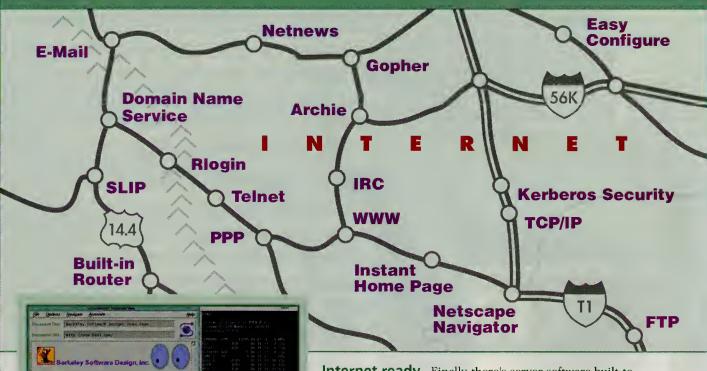
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**INFOWORLD 1/30/95** 

#### The INFOWORLD Score

BBN Internet Server (Based on BSD/OS)	7.6
BSDI Internet Server	7.0
Sun Netra Internet Server	6.3
SlackWare Professional	5.9
SCO Global Access	3.5

Internet ready. Finally there's server software built to connect with the Internet. The BSDI Internet Server integrates our complete 32-bit BSD/OS operating system and its bullet-proof TCP/IP with PPP and SLIP, global E-mail, FTP, Gopher, Archie, Netnews, World Wide Web, Netscape Navigator, and more. All you need is a 386, 486 or Pentium PC, and you're ready to deliver full-featured Internet gateway services.

The Internet server anyone can configure. The BSDI Internet Server is designed for configuration and operation so easy that even someone who's never used UNIX before can get a fullfunction Internet gateway and World Wide Web (WWW) Home Page up and running in less than an hour. Plus, built-in router capabilities connect directly to a modem, or – saving the expense of an external router - link directly to a 56K or T1 line with minimal extra hardware.

The better Internet server. Now you can confidently deploy industrial-strength Internet connectivity throughout an organization of any size. The BSDI Internet Server includes 60 days of free telephone support and a 60-day money-back guarantee, so you can establish your Internet presence with no risk. To receive a free reprint of the INFOWORLD Internet Server Product Comparison featuring the BSDI Internet Server, call 1-800-800-4273 today!

Berkeley Software Design, Inc. (BSDI)

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plugged in and the lights blink. In retrospect, the plugging and blinking don't really add much, but without it, I didn't "get" what was going on. If you don't have a SLIP/PPP account and a web browser, the concept of Procomm as a telnet helper application is so much nonsense.

Basically, a SLIP/PPP account does a very interesting thing. You dial ONE telephone number and make ONE connection using the analog telephone system. Once you are there, you can connect to literally hundreds of thousands of different things, including bulletin boards, from this single point of presence.

In fact, under Windows, you can actually do several things at once from this single connection - run an e-mail program like E-Mail Connection, and a Web Browser such as Netscape or Mosaic. And the web browsers have become the preferred interface. In previous years, accessing any Internet site was performed by selecting one of several very basic programs - ftp (file transfer protocol-for fetching files from remote sites) and telnet (to login to interactive services) the two most common. With a web browser, you can connect to any WWW site, AND you can also connect to Gophers, ftp sites, etc.

But there remain sites that are NOT really World Wide Web in nature. Many University libraries have a function allowing you to login and search card catalogs etc. To do this, you conventionally use a program called TELNET to connect to them - an extremely basic and spartan terminal program. To make this connection from a web browser, you must configure a separate telnet program as a "helper application." And in this fashion, if on WWW, you may encounter a hot link to a telnetable site. This is normally a telnet address highlighted in blue. If you click on it, the web browser passes the linked address to the helper application. The helper telnet program pops up on screen and automatically connects to the site allowing you to login. After you sign off, you exit the telnet app and you are back in the web browser and at the same place in the World Wide Web.

In the past two years, hundreds of conventional dialup bulletin boards have added Internet connectivity such that you can TEL-NET into the BBS. They aren't precisely on the World Wide Web, but they are accessible by telnet. In our June issue, we published a list of 198 such bulletin boards with their telnet addresses (i.e. telnet boardwatch.com).

But bulletin boards were designed to work with much more advanced terminal programs than telnet. And BBS callers are accustomed to ZMODEM file transfers, a capture buffer and capture file, dialing directories, built-in GIF image viewers, etc. Accessing a BBS by telnet is a bit like driving to the symphony in a cement mixer. In past issues, we described a utility program titled COMT that allowed you to use any terminal program such as ProComm, Qmodem, etc. as a telnet program over the Internet - it made the program look like telnet to the Internet, and made telnet and the Internet look like a modem to a program such as Procomm. But you could not configure it to work as a helper agent in Netscape. In the meantime, Procomm has added a built-in telnet capability that doesn't need COMT. And in the issue you refer to, we provided a script program that you can use to link Netscape to Procomm to do this automagically.

In this issue, we take it one step further. Mustang Software has built this capability entirely into Qmodem for Windows 95. You do not need COMT. You do not need a script. It is childishly simple to configure. And from Netscape, you can simply click on a telnet reference to a BBS. Qmodem comes up, makes the connection, and you have all the features of a full terminal program - but via Internet. No long distance charges.

I hope this clears it up a bit.

Jack Rickard

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Dear Jack:

I was hoping that someone at Boardwatch might be able answer a question I have or perhaps help me find someone who may know the answer. I work for CyberCash a company based out of Reston, Virgina that offers secure credit card payment services over the internet. We are also in the process of developing electronic cash. What I would like to know is if you have any idea of the aproximate number of BBS's and BBS users in the United States. We are very interested in making our services and software readily available to BBS operators. However we have found it difficult to get a firm grasp of the total BBS market in the US. Any information you can provide me would be greatly appreciated. Please feel free to visit our home page on the Web at www.cybercash.com for more information on our company.

Thanks, Drew Shepard dshepard@cybercash.com (voice)703.620.4200 (fax)703.602.4215

Drew:

Our last survey on this is over a year old. But it indicated about 64,000 public dial-up bulletin boards operating in the United States with an average 350 unique callers per BBS for a total caller population of approximately 22.4 million.

Jack Rickard

Jack.

My wife and I are sitting in New York looking at your home page from the IBM Global Network Booth at Pc-Expo. We are glad to see that your desk in your "virtual office" is as messy as mine. Is that an Ipad on your Windowsill?

Adam Viener Cyberia Communications, Inc. http://www.cyberia.com adam@cyberia.com Adam:

Pleased that we did in fact make PC Expoat least by wire. Yes, the virtual office thing has proven somewhat popular. My own is a bit daunting at this point with nearly 100 KB of graphics and trash before you actually get it. I've added a .jpg of me and the Hummer out on the Alpine Loop in Colorado's San Juan Mountains as the BACKGROUND for my own office page. That should slow these letters to the editor down a might.

Jack Rickard

FIBER & THE AC POWER NET

Jack:

After reading your "Editor's Notes" from the June issue of "Boardwatch" I found myself walking through a dark forest and chanting "I do believe in the Internet....I do...I do...I do! Remind you of anyone?

I sometimes think that we are living inside of some magical digital Oz and that if I should by accident click my heels together three times....well you know the rest. I don't want to go home!

In your Notes you mention some experiments in data over the power bus. Could tell me a little more? Who, what, when and where?

Regards,

David Evans Reader Rotundus

David:

The experiment I was referring to was active in the state of Kentucky, don't recall immediately any more than that. But since the editorial, Novell has announced a product to be released early next year that allows you to make Novell LAN connections over standard power lines by encoding the data and using the 60 Hz AC as a carrier. They claim 2 to 3 Mbps rates. So I would deem it a live concept that's actually picking up some heat. http://www.novell.com.

Jack Rickard

Dear Jack:

First, I'm really glad to be one of your 5% of female readers. I enjoy content, not glitz, and I love your magazine.

Because we have numerous high-tech clients clamouring at us to work with them on putting their publications, etc. on the Web, we need to get serious about getting our 25-person ad agency online instead of everything just going through my personal account. The obstacles seem awesome. Your most recent article helped a lot.

So far, my options seem to be going with a local consultant who advocates a UNIX solution or going to an access provider and getting 25 accounts and a bunch of modems, which I'd rather not do.

My question: do you have any contacts or know of any consultants in the Portland, OR area that I could work with? Also, do you think your IPAD solution is overkill for a company of our size that will be maintaining web sites for various clients, but isn't a BBS?

Thanks for your help and for all your clear thinking in the issues I've read.

Cherry Britton
Gba@europa.com

Cherry:

Pleased to have you with us. I do not generally provide specific recommendations for consultants - it's an area where I might appear to have more knowledge than I actually do, and of course getting the right one is great, and the wrong one is horrible.

I do not generally recommend UNIX as a solution for small offices. The technical learning curve is high, and each system has virtually endless configuration options such that you tend to become very dependent on whoever set it up. Even among UNIX gurus, calling in a new one to work on an existing system usually brings you to a situation where it's often less expensive to allow him to start over almost from scratch and do it "his way" than to learn where all the skeletons are from the previous sysadmin. It begs for a full-time sysadmin even for small systems. And yes, most consultants DO recommend UNIX. It is the ultimate operating system for sysadmin job security.

With regards to IPAD, I have no financial connection to this product or eSoft at all. But this particular product was developed over the past two years with a lot of input from our office so I naturally and in somewhat biased fashion tend to favor it as a solution. It has most of what I want built in by design. It actually has nothing to do with bulletin boards, although it does make it very easy to connect one to the Internet. It is rather an "appliance" to connect an office LAN to the Internet without having to use UNIX. And its strength is all the "unglamorous" things it does in fairly simple fashion. As noted in the article, it does domain name service, ftp server, telnet server, all electronic mail functions including POP3 and SMTP, and it eliminates the need for a router entirely. You literally plug it into a CSU/DSU modem to the T1 line on one end, and to your LAN by ethernet on the other. There are about three important "configuration files" that matter. They are a little more esoteric than I would like, but UNIX it's not. A kind of Telebit Netblazer on steroids with all the little UNIX-style administrative programs included - but much easier to setup and administer. I think the bulk of IPAD sales will be to small offices who want Internet access and email, and not much else.

That said, it does not act as a World Wide Web server. We have rather landed on WindowsNT as the web server platform of choice. With IPAD connecting us, we can hang a Windows NT server on our LAN just like a workstation with relative ease to be the WWW server. The combination of IPAD and WindowsNT is a less expensive and simpler to operate WWW solution, and it works extremely well with our existing Novell LAN setup - which was quite important to us.

A service provider with dialup SLIP accounts is a simpler option. And I'm sure with that level of usage you could get a very good deal on their hosting a Web page for you. If the main mission is to get e-mail in your office, it would work fine. But if, as an ad agency, you are taking a serious interest in World Wide Web as a medium, you are simply not going to be happy with the access speed when looking at web pages. Web pages are growing more graphic - read slower - every day. Offices, even offices half your size, are going to need a standing link to the net with e-mail and web browsers on every desktop. I think the IPAD can make that a much simpler task to accomplish.

But I would think so – It has my wish list built in.

Jack Rickard

YOUR WEB PAGE(S)

Hi, Jack!

I'm a fairly regular Boardwatch reader, when I can find it in the store. (I know, I really oughta go ahead and subscribe. I will, one of these days.) I'm sysop of The Cat's Meow BBS in Little Rock, Arkansas (1:3821/11). Not that that means anything, but I just wanted you to know...:)

I just got done reading your "History of the Internet" in the current BW issue, and I have to agree, the Web is what has driven the growth of the "Net" so greatly lately...me included. I suppose it's just because it's easier than having to deal with straight text, UNIX-style stuff I'm not really familiar with. (This from a BBS sysop!) But whatever the reason, I don't know that the emergence of the Web as the most visible aspect of the Internet is a particularly bad thing. It's perhaps the closest thing I've seen in a long time to the realization of the global village!

I suppose I'm rambling a bit, but having tossed in my 2 cents' worth, I did want to compliment you and your staff on a great magazine, and what appears to be a really well-thought out Website. I'm particularly happy with the search feature on past issues that I haven't seen, but have been referred to in later articles. That's nice.

Keep up the great work!

Bill Bdowns2@aol.com

Thanks Bill. I don't think it is a "bad thing" at all. For years we have mauled new online users with tales of stop bits and start bits and file transfer protocols and uploads and downloads and terminal types and so forth ad nauseum. Some days I look at it and wonder why anyone is online at all. With the Web, anyone can go anywhere with a few mouse clicks. It's the graphic interface we

needed. As TCP/IP moves into the operating systems (OS/2, WindowsNT, Windows95), a SLIP/PPP connection even becomes installable by humanoids. The outcome of this will inevitably be another new and larger wave of online participants. And it had to be done to get the next wave because they just weren't going to want to learn the difference between XMODEM and ZMODEM.

Jack Rickard

JUNE ISSUE

I have enjoyed your book off and on for the past few months. I think you have accomplished one of the first balances between print media and online. It will be interesting to watch the inter-play between the two.

In the last few issues, I have noticed a couple of pissed off subscribers in the Letters to the Editor. I applaude your willingness to publish the text of these letters in a open forum.

I am trying to make a decission to keep up with RIP based BBS's or bite the bullet and concentrate on the windows environment. I understand the windows environment is where all this stuff will eventualy shake out but, I am leary of version 1.00 of anything. Any help will be appreciated

Steve Loyola@ix.netcom.com

Steve:

Well, my operative philosophy is that it is better to be pissed off than pissed on. Many of those letters raise questions that are undoubtedly on a lot of minds, and it is fair enough that we publish and answer them. It is probably better to vent the ire, and as a result for our readership to be up on what's coming so that no one gets their picnic rained on — so to speak.

So to your question - RIP based BBSs are going nowhere. And Windows is swamping everyone's ship on contact. Version 1.00 is actually an adventure. But I view Windows95 as Windows 4.0 - first announced in 1986 and nearly capable of delivering what was promised then - finally. I think it will be a bit of a shakedown cruise, but that's where it is headed from my vantage point.

Jack Rickard

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JUST A "HELLO"!

Hi, Jack, Been liking the motion of your rag for the last several years now. Good work! And the WEB site is coming right along as well. Out of curiosity, why would you publish a list of newspapers online without their online addresses? Guess I'll need to go home and look at the 'rag' version of BW Mag and see if they're in there. Maybe I'm missing something here!

I have been watching your progress into the

land of TCP/IP as that is part of what I do daily as a networking and comm consultant in the SF BAy Area. But actually, I just 'linked' on in to your site via the Mustang Factory board where I was getting some driver updates for a client. Have always wanted to drop you a word personally, but just too damn disorganized usually. Well....OK... ALWAYS!

Us Novell kinda Guys gotta keep those Ducks in a row!

Sure.

Robert L. Huber, Rhuber@tlg.net Micro Management International Sausalito, CA

ps. What are the parameters for writing material for BoardWatch? You might consider putting the Auhor Guidelines etc online here too, eh? Geez. Just noticed that I've been carefully keeping my note in this verdamtes Comment box like a nebbish without a mind. Guess the native Buckeye genes win out over the rebel years in Berkeley..... or is it just old age? Ta!

#### Robert:

To my knowledge we've never published ANYTHING without their online addresses. But some addresses are WIDER than others. I looked at this list after receiving your email and it DID look barren. Scroll to the right another column and all live links are provided. We'll work on our visual formatting here a bit.

As to writing material parameters, visit our virtual office. David Hakala is our Editor-At-Fault and interacts with our columnists and contributors on a daily basis. A writer's guidelines document is available there for online viewing/retrieval.

Jack Rickard

#### A RANT AND A RAVE

Jack,

I do not mean to beat a dead horse, but in regards to restricting access to pornographic material, I have the following two cents worth.

Every individual, even youths, have to make decisions from time to time that may affect, alter, or in some way shape their attitudes and beliefs. It is as inescapable as death and taxes. As a youth, I had many opportunites to puruse the annals dedicated to women, unfettered by the garment-makers of America. As I developed my own standards of decency and morality, I no longer considered these mags with the same fascination. This process of maturation is something everyone must eventually face. As you mentioned, there are those who never develop the ability to interact with the opposite gender and sometimes develop into depraved individuals. By usurping a minor's personal volition, one will not cause him to adopt some more decent standard. Whether or not he views pornographic material on the internet, in a publication, or on the boob tube will not determine his moral standards. It is a personal choice and the powers to be have no real influence on this choice. Prohibition tried to change a personal choice, also.

Those that do have an affect are the parents. My standards began by emulation. Parental guidance is there to maintain one's humility, manners, and behavior until one is old enough to police themselves. Today, our legislatures are convinced that they will make up for a lack of parental guidance, by writing laws to enforce "good" moral conduct. Won't happen. If parents don't want kids seeing dirty pictures then see that they don't. Parents need to start parenting. I can speak on this because I have helped bring up the kids that received no parenting. Its an epidemic.

I'll stop here, before I launch into some drivel about licensing parents. Excellent publication, Jack. I've been monitoring the online world for a few years, now and without your magazine I would be much harder pressed for an objective analysis of the whole thing. Thanks.

Batkinso@gilbreth.ecn.purdue.edu

Batkinso:

I agree completely, only more so. I am reaching the conclusion that the entire concept of "protecting kids" via government fiat is bogus. It's a battle cry that preys on our natural instinct to protect those smaller and weaker than ourselves. But its effect, and I have come to believe its intent, is simple expansion of governmental powers. We have made a horrific mistake allowing governmental regulation and law regarding marriage, divorce, child care, child abuse, sexual conduct, and all matters of home, hearth and family. Once invited in, they have enormous power over our personal lives and at this point the virtual police state we are teetering at the edge of is not going to hand it back privily. The legal system deals with it poorly, and we have an entirely separate enforcement group only barely connected with the legal system that has their own jack-boot methodologies.

It is currently in full assault on the topic of what we say to each other. They demand the right to KNOW what we say to each other as a "legitimate interest of the state" and they demand to regulate it as well to bar specific things they don't want said or viewed. Frankly, if I ever thought it would be limited to nasty pictures of trailer-park babes, I would probably pass on this issue. I don't care that they exist. I wouldn't care if they didn't exist. And I don't view them as a threat to my children frankly. But the methodology is without exception. They pick the most egregious example of abuse, appeal to our desire for safety offering to "protect us," and then in the confusion and uncertainty, simply seize what powers they think they can get away with this week. By successive approximation, we are becoming a nation of serfs to a federal fascist state.

At this point I'm willing to declare our land a totalitarian state and all those in jail for information offenses of any kind political prisoners.

Jack Rickard

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#### YOU

Jack, as a longtime subscriber who has seen the book go through several (upward) transitions, I can say you are more than "aren't you special?"—you are unique. You must constantly be amazed every morning when you awaken to find out you are you.

And this just in! The Naples (FL) Free-Net goes online July 1 with, we expect, Al Gore dropping by to do the honors.

I'm writing this from Cybergate=Hotwired. And I am going to subscribe BECAUSE of this web being so fantastic. I have a couple years to go on my Boardwatch...and it really is difficult to take this into the bathroom or bedroom to read. Nor can I pass it along—marking the most interesting items. So...I'm not unhappy that I have a couple years to go on my subscription.

Terry

76416.131@compuserve.com

Naples Free-Net co-founder, media center director, policy board member AND Naples PC BUG (business user group) v.p.

Terry:

Waking up each morning to find that I am me is indeed an experience. Probably not precisely what you imagine, but an experience none the less.

Congratulations on another Free-Net addition. So what's the domain address or dialup for Naples Free-Net?

Jack Rickard

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Hello,

My name is Steve Postma and I am a furnituremaker from Boston, MA. I would just like to let you know of my new web site at http://www.channel1.com/users/postma (thats channel-one). I have what I believe to be the first comercial site for a custom furnituremaker in the world! I have put quite a lot of time into this site and am proud of it, as I am of my furniture. In the past my work has gone to American Embassies and International Four Star Hotels. I specialize in veneer and curved work, and am capable of a wide range of finishes including black lacquer, gold leaf and faux finishes. At my site you can view examples of some of my recent jobs and read about the work that I have coming up. All work including my home page has been done by me.

This page has been open since 6/15/95 and I receive about one email a day about my work. Some of the comments include: 7108T1@Aol.com-"I surfed the web for the first time tonight, and your furniture page was the first I explored, what a treat!"

j\_norton@ix.net.com-"I am quite
impressed with your work!"
Berry@a.chem.upenn.edu-"Gorgeous!"

SCJI@Aol.com-"Awsome Page!"

There is also a very extensive hot list there with upwards of 500 URLS to be explored!

Please take a look at my page and leave a comment!

Thank You for your time,

Steve Postma, Furnituremaker and Design 574 Boston Avenue Medford MA 02155 (617) 395-7287 Fax (617) 665-9895 Email- postma@user1.channel1.com http://www.channel1.com/ users/postma

Steve:

The price we pay for paper to print Boardwatch Magazine has almost precisely DOUBLED since January 1 of this year. And I do hope your letter doesn't create a storm of web page announcements in our letters section. But I just had to put yours in this month.

First, one of the most relaxing and enjoyable hobbies I've ever had, years ago when I had a life, was making furniture. It is exacting work, but it put my entire mind into another zone more in tune with glues and fine woods than with the anxieties and stresses I otherwise dealt with. I have a couple of monstrous book cases that still cause some pride when I view them. While not up to your level of artistry, I would note they use no concrete blocks in their design and took a couple of hundred hours to build. I love them.

Second, I note a trend among some of the larger BBS operators worthy of mentioning. They are not only virtually all offering Internet connections and services, but I'm seeing some notable participation from their CALLERS in creating web pages. Channel 1 has been a major system in the Boston/Cambridge area since 1985 or '86 as a BBS, and now allows callers to host their own world wide web pages! I see the same thing with Aquila BBS in Chicago and Kevin Behrens tells me a winsome tale of a Windows NT feature called WINS that allows a directory on HIS system to appear to be a drive on a caller's - allowing them to maintain their web pages with incredible ease over a SLIP/PPP connection.

I have said for several years now that Internet Service was primarily a customer support function and that the scaleability problems inherent in providing dialup connections would eventually cause BBS operators/small Internet Service Providers to be the only ones able to do it well. EVERYONE has taken exception to this, noting that it would all be provided by enormous giants like the telephone companies and cable TV companies. Call your cable company and tell them your TV picture is doing funny things and see what kind of customer service you receive. Until the Internet is as plug and play as TV or standard voice telephone, it ain't gonna happen. And a little bit of net is just a tease. First you call a BBS. Then a little e-mail. Now we have a furniture maker making time with his own Web page. (Nice page by the way.) It is ever so and will be so for some time.

And finally, special topic systems have always been my personal favorite. Yours is a good example why. Good luck with it.

Jack Rickard

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#### JUDGE AIN AND HIS RULING

Jack:

Great magazine. Insightful writing, blah, blah, blah...I really enjoyed your response to Scientology. Organized Religion is kind of like a pet peeve of mine, I love it when there methods backfire like this.

The usual kudo's. I recently began publishing a small town Electronic Publication, Magazine on disk, in what the statistics types call " the fastest growing city in America". It has been very well received despite political nervousness. I recently Started a BBS in conjunction with the magazine. I work full-time as a Police Officer and have taken the Magazine and BBS off the ground slowly in my free time. I read Boardwatch every month for my dose of Rickardness and I enjoy the way Boardwatch keeps us abreast of legal decisions that effect the online world. I normally write off the idiot proposals as uninformed legislators with as much online experience as a noodle. I was very concerned when I read the decision out of New York on the Prodigy case. All Law's are written with various interpretations built in. I deal with this scenario every time I try to match an obvious offense with the less than obvious legislation written for the State of Ohio. I wonder about the obvious interpretation of this case. It appears to be very broad. I sit here staring at my brand new Excalibur BBS system with very few files and even fewer message bases, and wonder if this ruling will apply to me. In the most open interpretation I realize that my users are given three screens of policy information upon initial sign in. They are forced to agree with these policies before further browsing the BBS. They are given the option of logging off if they don't agree to comply with those policies. In the broadest sense I guess I am "controlling the content of the board". I appear to have made a "conscious choice to gain the benefit of editorial control" in fact I have. I recently denied a post that slandered the Local Mayor. I denied it more because the information was totally wrong, not because I am afan of the mayor. The post was just error filled. I personally would like to see the mayor unseated but not with garbage info from my board. Some people know that I am an employee of the City and I didn't want them to think the information was accurate because they saw it here. I corrected the individual on a few points and he wrote another post. In a more closed view of the court decision I guess I could just go on with blinders, hoping that without real deep pockets, no-one will pay any attention to my little board in the burbs. In my profession though I have learned that if there is a possible settlement, there is a possible Lawyer, to file a possible suit. Now where do I take my little tiny BBS. The stipulation that Prodigy isactually a Publisher and not a distributor of computer services is very scary to me. I hold myself out as an

Electronic Publisher, with a companion BBS system. I am having trouble finding insurance (at least at a decent price) because of cases like this one. I was told by one insurance company that if I upload my Electronic Magazine to the Internet they would not even think of underwriting it. If I remain local they would sell me a half-ass policy for a pretty penny. I cannot guarantee that one of my end user's would not upload the magazine to a major system or wherever. Insurance companies that underwrite paper publications tell me that the modem makes distribution a factor that is beyond estimate. Therefore so risky that they tell me they don't need the business. Most of them don't understand the concept of a magazine on Disk anyway. I explain it more as a Multimedia program nowadays (it contains graphics and animation etc. etc. ) than as a magazine. I find that this court decision places me in a very uncomfortable position. A couple of more decisions like this and my little hobby could become extinct, along with a lot of really good forums, BBS's and Jackass trough's. Keep up the good work. Plugging away on my end....

R.Fraley
Editor, Publisher Rotundus
Hilliard Online Magazine
Hillonlne@aol.com
Crookchasr@aol.com

Mr. Fraley:

Precisely so, if a bit run-on. The concensus among the legal eagles seems to indicate they have little faith in the long-term viability and impact of Judge Ain's decision. But it was made and certainly has Prodigy hanging from the ceiling at this point. And I think you read it correctly. If you moderate, delete messages, ban unruly users, even screen out obscenities, you become publisher and are liable for ALL posts on your system.

It's all a matter of control and the desire for control. If you rely on being a little BBS, then they can have you whenever they want you. You can be allowed to exist because they can come shut you down on a whim. And there is the further possibility that some in power in this country don't see a particular benefit to having all these little hobby bulletin boards and web sites. Very difficult to regulate and police. While you and I may assume it to be universally recognized that thousands or even millions of independent little online services, each with their own club of participants and point of view, is inherently a good thing, there are many who don't think it is good at all.

As to insurance, I think it is a form of blessing that you cannot get it. Big insurance policies make you a big target. Publishing generally is nearly uninsurable at this point and I think that in itself will dampen the litigation furor. Part of what feeds it are businesses that don't have \$75 in recoverable assets but do have \$2 million in umbrella insurance.

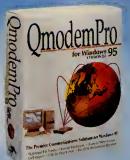
Jack Rickard

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# Don't Start Your Modem Without The 32-bit Power Of OmodemPro For Windows 95







You're a speed freak, right? You bought the Pentium and 28.8 modem, and you just upgraded to Windows® 95 to take full advantage of your computer's 32-bit architecture. So why are you using old 16-bit communication software that chokes the performance of Windows 95? Get on-line fast with the 32-bit POWER in QmodemPro for Windows 95 v2. It's

the first communication software that delivers all the features and performance you need to get the most from the new 32-bit Windows platform. And since you demand performance, you'll like the fact that QmodemPro's communication and Internet capabilities go way beyond the standard terminal software included with Windows 95. So whether you're connected to the office, company mainframe or BBS for data/file transfer, you'll get the powerful, 32-bit technology in QmodemPro to satisfy your "need for speed."

800-807-2874

Available at Software Etc., Babbages, Computer City, CompUSA, Electronics Boutique, Egghead and other software outlets for \$129 or less.

Registered Qmodem/QmodemPro customers call for upgrade pricing.

#### Connecting The World

Mustang Software, Inc. • 6200 Lake Ming Road • Bakersfield, CA 93306 Voice 805-873-2500 • Fax 805-873-2599 • BBS 805-873-2400 Internet http://www.mustang.com

#### **Exciting New Features Include:**

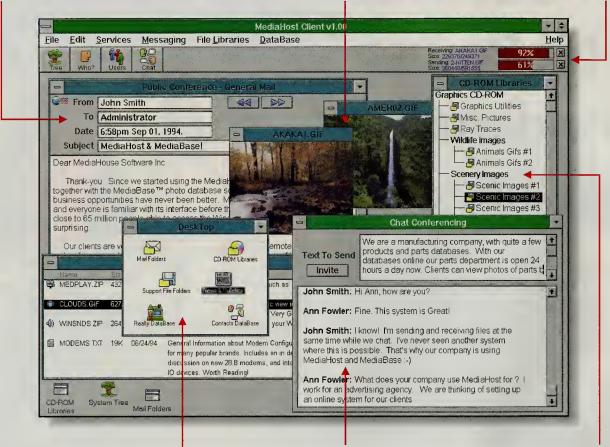
- A Phone Book that uses Explorer style menus and buttons, with display options including Large Icon, Small Icon, List and Detail styles.
- OLE 2.0 support so you can drag & drop files, phone book entries and text to and from other Windows applications quickly and easily.
- 35 Terminal emulations, including ANSI, VT100 and IBM 3270 to get you on-line quickly while the programmable keyboard will satisfy the needs of any system administrator.
- A programmable tool bar with up to 50 different program function icons.
- A graphical file viewer that lets you display files in GIF, BMP and JPEG formats with zoom, even while downloading.
- Fully multi-threaded protocols that keep going even when your PC is very busy.
- Transfer files with 10 high speed protocols, including Zmodem and CompuServe B+.
- TAPI support for sharing communications devices between multiple applications.
- MAPI support for transferring text, images and files to major mail applications including Exchange, Microsoft Mail, and cc:Mail.
- Telnet support with MD5\* secure passwords for Internet access to your favorite sites.
  - \* RSA Data Security, Inc. MD5 Message-Digest Algorithm
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# So You Need to Setup an Online Service...

E-MAIL - Private and public message areas, user mail boxes, and file attachments all in an easy to use word processor style editor.

Users can preview graphic images from CD-ROM, hard drive or any other mountable volume.

Send and receive files while using system features such as chat, and e-mail.



Menus, templates and screens \_ can be easily customized to suit your application requirements using the MediaHost Visual Designers.

Multi-user chat with Clipboard support and scroll back.

Support for Push Button, Floating Icon, Item List, and Tree List menus.

## MEDIAHOST

Online Server for Windows™

MediaHouse Software Inc. 32 Eardley Road, Aylmer, Quebec, Canada J9H 7A3

Sales & Info B19-682-9737 Demo System 819-682-3330 819-685-0994



Starting at \$195

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- Corrects for line noise.
- · Free Client software.
- · Includes visual design tools.
- Configurable menu structure.
- Definable security.
- · Ordering and sales interface.



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# ...and You Want to Put Your Databases Online.

Custom database menus are easily created in the MediaHost Visual Designers and Icon Editor.

Up to fifteen images or text files can be displayed for each record in the database. MediaBase also supports memo fields.

Custom templates can be created to display database records. You decide what fields your clients can view.



Databases and query results are displayed in a spread sheet view which is used to quickly browse through records. Images are sent seamlessly in the background using the MediaHost bi-directional protocol.

# MEDIABASE

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MediaBase offers support for multiple high quality 24 bit images, for each record in the database.

MediaHouse Software Inc.

32 Eardley Road, Aylmer, Quebec, Canada J9H 7A3

Sales & Info 819-682-9737 Demo System 819-682-3330 Fax 819-685-0994



- Reads/writes dBASE, FoxPro and Clipper files.
- Can display JPEG, CMP, TIFF and GIF™ images.
- Allows multiple image and document files per entry.
- · Allows security based entry and editing of records.
- · Background searches allows viewing of data as it is found.
- Intuitive spread sheet view.
- · Supports multiple databases.
- · Configurable spread sheets, templates and queries.
- · Configurable multi-key searches.
- · Integrates with MediaHost ordering interface.

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Nothing grows quite as fast as the on-line world. If you are going to work in this world, you need a package that is going to give you the most power for the least hassle.

Galacticomm's Worldgroup Software gives you this power and flexibility, and offers add-ons for every conceivable system.

**Don't Get Left Behind!** 



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Allow customers to purchase subscriptions with checks on-line.



#### **Galacticomm Software**

As a dealer, we offer below retail prices on Galacticomm's full line of software to get you going or help you expand.

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8-User version of the most powerful on-line system available!

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Increase your system to whatever size you require.

Anything Else...Just Call!
If Galacticomm makes it, we sell it!

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Important programs to make the Sysop's life a little bit easier.

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The immortal BBS game goes multi-user and takes on new twists.

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#### **Cyber Wumpus 2010...\$99**

Client/Server and ANSI users fight together to slay the evil Wumpii.



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# Need expert BBS help? SM

#### ✓ Unmatched Experience

We are a full-service, professional company that specializes in telecommunications hardware and software, Bulletin Board Systems and related applications. For over twelve years, we've been setting up bulletin boards for customers world-wide. Our experience is proven by the awards our 64-line BBS has won over the past twelve years, including winning 13th place in the Boardwatch Top 100 contest! We know what it takes to run a successful BBS, and we can share our experience with you!

#### ✓ Turnkey Solutions

In addition to selling the software and hardware components necessary to let you put your own system online, we have the ability to provide our customers with total turn-key systems. We have several programmers available to transform your ideas into realities quickly and at very reasonable rates.

#### ✓ The \$5 Difference

Because we are a "VAR" (Value Added Reseller), we offer service before and after the sale. Here's an example: What happens if your DigiBoard has a problem after you've bought it? If you buy it for five dollars less, you have to ship it back to the repair center to get it fixed. Buy it from us, and for the first year you own your board, if you experience a problem, we will send a replacement one out to you, overnight, at no charge.

It's that added value that makes the difference. Not the five dollar price war that these "one-man" shops are running. We are able to provide you with a truly economical solution to your needs, without sacrificing quality. Call us. Just talking to us on the phone, you'll hear the difference.

#### ✓ Our Services:

- ☐ BBS Software Sales
- ☐ On-site Installation
- ☐ Configuration Assistance
- ☐ Custom Programming
- ☐ Remote BBS Support
- BBS "Service Bureau"
- Application Generation
- ☐ Training and Support
- Professional Consulting
- ☐ ISDN Installation and Support
- ☐ Internet Connectivity for BBS and Local Area Networks

#### Helping Customers Since 1983!

No other company in this industry has the skills and experience that we have. Nobody! We're the proven industry leader for over twelve years. If you need some advice, why go to the "new kid on the block?" We'll be there for you before and after the sale. Call us today and let us help put you online!

Rodney A. Aloia President

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WorldGroup 8-user ...... \$400.00 WorldGroup 20-user ..... \$785.00

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PC/16i	\$1175.00
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New! 8 foot cables	ea \$15.00



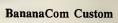
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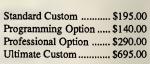


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#### APPLE PETITIONS FCC FOR FREE PUBLIC SPECTRUM

Tow does free local and long distance voice/data How does free local and to you? Apple Computer Inc. has filed a petition with the Federal Communications Commission that requests 300 Mhz of spectrum in the 5 Ghz range - not for Apple, but for public use! Apple's petition would make this spectrum available free of charge to anyone, subject only to interference-reducing technical standards. Hit http://www.warpspeed.com to read the entire 865 Kb petition and current comments on its status and implications. The latter include free voice/data communications for residential, educational, business, community, rural and mobile users. Does Apple's bomb threat to the RBOCs, cellular and satellite industries stand a chance? Maybe not, but it's fun to see those ant hives stirred up a bit. Do your part by sending a letter or postcard referencing Petition RM-8653 to: Office of the Secretary, Federal Communications Commission, Washington DC 20554.

#### U. S. ROBOTICS ANNOUNCES 33.6 KBPS

On July 12, U. S. Robotics announced new software for its Courier and V.Fast class desktop modems and the Total Control systems products that provides 33.6 Kbps connect speed capabilities. The new software also provides higher data throughput rates at any speed, according to the announcement. Courier and V.Fast Class product owners can download the flash-ROM upgrade software from USR's BBS (708)982-5092 or Web site http://www.usr.com

#### **SUPRA LOWERS SYSOP PRICES**

Supra Corporation announced a new, lower schedule of prices for modems sold under its sysop-discount program. Qualifying sysops can purchase SupraFAXModem 14.4Kbps models for \$109.95 to \$129.95 or 28.8Kbps models for \$139.95 to \$159.95. Not so many years ago, some companies were getting that much for just a buffered-UART serial card. Contact: Supra Corporation, http://www.supra.com or voice (800)727-8772 or (360)604-1410.

#### GALACTICOMM CUTS WORLDGROUP PRICES

Galacticomm, Inc. has dropped the two-user version of its WorldGroup server software and halved the price of its low-end eight-user version to \$595. Customers who purchased the two-user WorldGroup will automatically receive a free User Six-Pack license upgrade with their free copy of WorldGroup 1.01, scheduled to ship in mid-August. User Six-Packs, which expand the user count license by six simultaneous users, have been reduced \$100 to \$295 each. All WorldGroup customers who purchased Six-Packs at the old prices will receive a

\$75 credit for each Six-Pack purchased through discount dealers or a \$100 credit for each Six-Pack purchased directly from Galacticomm. The credit may only be applied towards purchases made before December 31 and directly from Galacticomm. The WorldGroup Client/Server Developer's Kit has been discounted \$300 to \$395. Existing owners of The Major BBS software can upgrade to WorldGroup with no change in user count for \$199 until November 30. The company has also dropped the price of its Automatic Software Update Program (ASUP) to \$395 per year for U. S. customers and \$495 per year for international customers. Contact: Galacticomm Inc., (305)583-5990 voice; (305)583-7808 BBS; http://gcomm.com

#### SMALL BUSINESS WEB PROGRAM FROM CERFNET

Piecing together the ingredients of an effective "Net presence" is a time-consuming puzzle for many small businesses. CERFnet, one of California's oldest Internet Service Providers, offers a plug-n-play package at a reasonable price. A \$99 setup fee and \$99 per month gets you 99 hours of 28.8 Kbps dialup or 56 Kbps ISDN access and licensed commercial Net tools for Windows or Mac users. Good prices if you want to spend half of each monthly business day Net-surfing. But the most significant part of the deal is a Web page for your business and weekly usage reports. Tollfree access numbers are available for out-of-state travelers at \$6 per hour. The company offers other services for more ambitious infopreneurs. Contact: CERFnet, (800)876-2373 or (619)455-3900 voice; e-mail:// sales@cerf.net or http://www.cerf.net

#### SUPERBOWL XXX WEB PAGE

The Super Bowl XXX Host Committee recently announced that the Official Super Bowl XXX Home Page would debut on the Web July 1. But the press release omitted a URL. Host Committee spokesperson Amy Roffman New tells us that www.superbowlxxx.com is already registered. Amy and company really want superbowlxxx.com and are negotiating with its present owners; meanwhile, you can hit http://www.superbowl.asu.edu to watch the official Superbowl XXX site take shape.

#### **NETHERLANDS GETS ON THE INTERNET**

Netherlands citizens can now "go Dutch" on the Internet, with help from Evolution Online Systems – (212)843-5536 voice or http://www.evolution.com – of New York. Netherlands PTT, the Dutch telephone company, announced that it sold over 15,000 starter kits during the first week that Internet service was offered. Evolution Online Systems is one of a growing herd of U. S. ISPs whose expertise is in lucrative demand overseas.

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#### SGML BROWSER, NEW HOTMETAL PRO FROM SOFTQUAD

SGML (Standard Generalized Markup Language) is a generalized "metalanguage" that allows tremendous flexibility and options in the types of documents, indexes, hyperlinks, fonts, character sets and other elements one can use. HTML is actually just one implementation of SGML's capabilities. Many large publishers, corporate and institutional document managers have amassed terabytes of SGML document databases, quite a bit of which they would like to make available on the Internet. The problem has been, what will consumers use to browse SGML pages?

SoftQuad, maker of the HotMetal Pro HTML editor, has released Panorama PRO, billed as "the first commercial SGML browser for the Internet." Organizations such as NASA's Jet Propulsion Lab, The Unviersity of Michigan, O'Reilly & Associates and Intel Corp. have already begun publishing SGML files on the Web using Panorama. Examples are online at http://www.ncsa.uiuc.edu/SDG/Soft ware/Mosaic/WebSGML.html - but first you'll need a copy of Panorama. SoftQuad charges \$139 for v1.11. The freeware v1.06 that can be found at ftp://ftp.ncsa.uiuc.edu/Web/Mosa ic/Windows/viewers/panofr10.exe will help you decide whether to pop for the commercial version.

Simultaneously, SoftQuad has released v2.0 of its HoTMetaL PRO HTML editor. It includes import filters that open and convert 25 document formats including MS-Word, WordPerfect and AMI Pro files; toolbars that faciliate embedding of tables, links and other elements; and enhancements to existing features. Version 2.0 retails for \$195. Existing users can upgrade from v1.0 for \$59. Contact: SoftQuad, (800)387-2777 or (416)239-4801 voice; (416)239-7105 fax; http://www.sq.com

#### THE WELL SHIPS WHOLE WORKS INTERNET TOOLKIT

The Whole Earth 'Lectronic Link has teamed up with UUNET Technologies to provide dialup PPP accounts from an initial 50 U. S. cities at a minimum cost of \$15 per month and a \$15 registration fee. Subscribers receive The Whole Works Internet Toolkit in either Windows or Mac version. It includes a self-installing TCP/IP stack, Netscape 1.1, PC Eudora, a USENET newsreader, telnet and ftp clients and (only for

Mac users) a gopher client. Members can use the WELL's WebExpress personal page publisher to create their own web pages. The monthly minimum includes five hours of connect time at up to 28.8 Kbps; additional time costs \$2.50 per hour. Heavy PPP users and telnet-only prospects can e-mail://pricing@well.com for other pricing plans. Contact: The WELL, (415)332-9200 voice; e-mail://info@well.com or http://www.well.com

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#### **AOP OPENS WEB SITE**

The Association of Online Professionals opened a WWW site at http://www.wdn.com/aop on June 1. The site provides information about AOP, its activities and membership benefits. Other pages provide lists of members' BBSs and Web sites and directories of Internet Service Provider members. Members who wish to submit pointers to their Web sites should provide the URL, a 50-word description of the site and an icon in GIF format. Submit new listings and revisions to e-mail://webmaster@aop.org - AOP: (703)924-9692 voice; (703)924-9594 fax; e-mail://info@aop.org

#### JONES EDUCATION NETWORK

Adults increasingly want to continue their educations, and they want to do it from home or work. Jones Education Network, part of cable TV giant Jones International Ltd., can now be found at http://www.meu.edu on the Web. Mind Extension University, an award-winning distance-learning program, is one link on this page. The Global Library links to the Library of Congress, American Memory Project, National Library of Canada, the Confederation Project and other online library systems. Jones Computer Network's cable TV program descriptions, schedules and press releases are online. International University College offers a Master of Arts degree in Business Communication to students worldwide, using videotapes and online text communication tools. Contact: The Mind Extension Company, (303)792-3111 voice; e-mail: //webmaster@meu.edu

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#### BED & BREAKFAST/COUNTRY INNS ON THE WEB

1st Traveler's Choice - http://www.virtualcities.com/~virtual - showcases hundreds of bed-and-breakfast establishments, country inns and small hotels throughout the U. S. and Canada.

Travelers can select a state or province to see a list of establishments further broken down by local areas. Click on an establishment's name to view a picture of the place and read its description. Owner Lucinda Stone says some innkeepers got bookings their first day on the Web. Contact: 1st Traveler's Choice, (415)989-2489 voice, (415)989-2499 fax.

#### KETCHUM KITCHEN OFFERS

RECIPES, TIPS ONLINE

The Ketchum Food Center is the test kitchen of Ketchum Public Relations Worldwide. The 25 year-old firm specializes in "recipes, test ingredients, track(ing) food trends and dream(ing) up creative new ways to use all kinds of food and beverage products." Now cyberchefs can drop into the kitchen to talk food and raid the experts' files of recipes, shopping and cooking tips. Contact: Ketchum Public Relations, (415)984-2207 voice, http://www.recipe.com or e-mail://alissa\_bushnell@ketprsf.com

#### "GO DIGITAL" CD-ROM/WEB MAGAZINE DEBUTS

A quarterly magazine could never keep up with the pace of innovation in multimedia; that's why Go Digital, a new CD-ROM publication, is linked to Go Digital Online - http://www.godigital.com a Web site that presents the latest stories, features and photos in between issues. Readers can also communicate with editors, writers, special guests and each other. Sold at \$14.95 through major software and book stores, the magazine covers "the brightest stars in multimedia and the latest developments in the rapidly evolving digital world." The premier issue offers a music scene survey including indepth interviews with the creators of IUMA, the Internet Underground Music Archive (see "Babb's Bookmarks" in this issue); a look inside the computer gaming industry; a preview of the upcoming MGM feature film Tank Girl based on the underground comic book heroine; a reader-directed interview with Timothy Leary; and samples of new music, games and consumer technologies. Contact: E-Media, 1517 20th Street, Santa Monica CA 90404; (310)315-3606 voice; (310)829-2047 fax.

#### TELEGRAFIX RELEASES RIPAINT 2.0 BETA

Telegrafix Communications Inc. announced that RIPaint v2.0 Beta

Developer Kits will be made available to 300 RIP developers on July 17. The announcement projects a September release date for the "final commercial version of RIPaint 2.0." Beta kits cost \$100 each and are limited to one copy per organization. Contact: Telegrafix Communications Inc., (714)379-2141 voice; (714)379-2132 fax; (714)379-2133 BBS; e-mail://sales@telegrafix.com

CINET ONLINE REGISTERS 30,000 PEOPLE IN TWO WEEKS

If you like pure computer, multimedia and cyberspatial news, C|NET Central the TV show is for you. Now you can get your daily fix at http://www.cnet.com which opened June 24. Touted as "the largest original content site on the Internet and... devoted entirely to computers, multimedia and online services," the site logged over 30,000 registrants and served up 748,211 HTML pages in its first two weeks. The free service offers "deep resources and additional original editorial content" related to each TV segment. C | NET Central airs six times a week on the USA Network, the Sci-Fi Channel and San Francisco's KPIX 5 CBS affiliate. Contact: C | NET: The Computer Network, (415)395-7800 voice.

#### ZIFF-DAVIS 1995 SHAREWARE AWARDS

Ziff-Davis Publishing honored the 1995 winners of its Shareware Awards in a ceremony held June 23 during the Shareware Industry Conference in Scottsdale, Arizona. The overall winners are:

**CD-QUICK CACHE** by Circuit Systems – PC Magazine Best of Year Overall. "...CD-ROM cache delivers great performance and...optimizes random reads."

GREATEST PAPER AIRPLANES by KittyHawk Software — Computer-Life Best of Year Overall, Home & Hobby category. "Cool paper airplane-folding software."

HERETIC by Raven Software/id Software – Computer Gaming World Best of Year Overall, Action Games category. "... the second straight year that id Software has captured both action game and game of the year honors."

Other notable awards went to

SLIPKNOT by Peter Brooks/MicroMind — Communications category: a graphical Web browser for shell account users who have access to the lynx or www text-only browsers. (See our July '95 issue.)

**INNER-NET** by Jim Runkel — Networking category: "enables group desktop-based discussions over office networks with unlimited channels and allows you to page users."

TIME AND CHAOS PROFESSIONAL by iSBiSTER Intl. — Personal Productivity category: "out-values just about any Personal Information Manager on the market."

All the winning and nominated programs are available for downloading from ZiffNet on CompuServe — GO PBSAPPS and look in Library 23/ZD. CompuServe members can join ZiffNet with the GO ZIFFNET command. You can also call (800)895-4596 voice for instructions on connecting directly to ZiffNet, or look for these programs on BBSs in your area.

#### REYNOLDS & REYNOLDS ACQUIRES DEALER INTERNET CORP.

Automotive manufacturers, dealers and related suppliers will find it easier to market their wares directly to consumers, thanks to announced by Reynolds & Reynolds, the supplier of information management systems to more than 90 percent of franchised automotive dealers. Reynolds has purchased Dealer Internet Services Corp. (DISC) of Lynwood, Washington, DISC has 21 dealer subscribers in six states using DealerNet Web site http://www.deal ernet.com - as their Virtual Showrooms. Consumers hit 1.5 million pages of information in May. Over 4,500 pages of information from 48 car companies are on the site, including full-color brochures, motion video clips and dealer inventory databases. Reynolds plans to expand the consumer services and add dealer parts and accessories features. Contact: Reynolds & Reynolds, (513)443-2000 voice.

#### **PCBOARD CONFERENCE SEPT. 21-24**

Clark Development Company will host the first PCBoard/Online Communications Conference for PCBoard sysops, third-party vendors and other interested parties September 21-24, 1995. The conference will be held at The Prospector Inn Resort in Park City, Utah. Sessions will cover "the basics of how and why to set up a successful BBS operation," including links to the Internet, multitasking procedures and operating systems, FidoNet and UUCP operations, writing PPL (PCBoard Programming Language) applications, marketing and other business considerations. Registration costs \$249 if

received by August 31st, \$299 thereafter. Contact: Clark Development Company, (801)261-1686

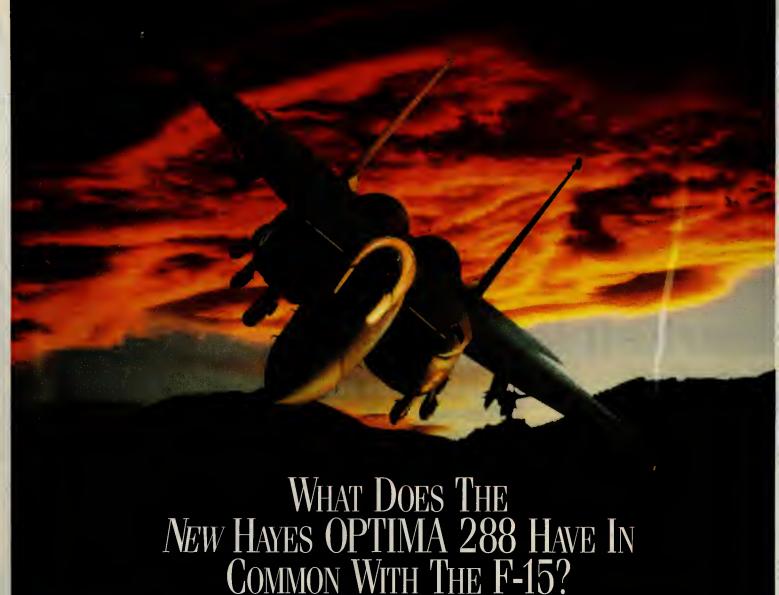
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#### SURFWATCH WOOS CONGRESS, AOL AND VENTANA COMMUNICATIONS

SurfWatch Software loosed a trio of announcements on July 17. The company's Internet site-blocking program was presented to Congresspersons Chris Cox (R-CA) and Rony Wyden (D-OR), sponsors of the "Internet Freedom and Family Empowerment Act," as an alternative to government restrictions on what Internet service providers can make available. SurfWatch also quotes America Online President Ted Leonsis as saying that AOL "plans to use tools from SurfWatch to expand our Internet parental control capability." Finally, SurfWatch claims that Ventana Communications Group has "signed an exclusive retail affiliation... which will make the software widely available" in U.S., Canadian and United Kingdom stores. Still no word on when SurfWatch users will be allowed to edit the canned database of blocked sites that comes with the program. Contact: SurfWatch Software, (415)948-9500 voice or http://www.surfwatch.com

#### NETWORKING OVER ELECTRIC POWER LINES

Novell, Inc., is working on protocols and interfaces that will let Netware users link remote locations using ordinary electric power lines instead of phone lines or special cabling. The Powerline Technology, expected to be available in the first half of 1996, could deliver 2 to 3 Mbps throughput. Novell is working with several modem manufacturers on highspeed power line modems would plug into an electrical outlet and convert Ethernet traffic to Powerline Technology traffic. A router would convert Powerline traffic to TCP/IP or another standard net protocol for transmission to headquarters, the Internet or any other destination. Powerline Technology uses Novell's NEST (Netware Embedded Systems Technology) to enable remote monitoring and control of "smart" devices ranging from climate control systems to coffee makers. In addition to corporate and Internet communication applications, Powerline Technology would enable remote troubleshooting of smart appliances, enhance premise security systems and facilitate home energy management systems. Public utility companies and major appliance makers such as Sears, Roebuck & Co. are already planning such services. Contact: Novell, Inc., (801)429-**7000** voice. ◆





#### The Ultimate Business Modem

#### **Advanced Business Features**

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- + Caller ID and Distinctive Ring
- + Dial-back and Password Security
- + Flash ROM
- + Plug and Play In Windows 95

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Advanced Features That Get Down To Business. The F-15 has advanced weapons guidance and pulse-doppler radar to detect enemy aircraft. The OPTIMA 288 gives you data, fax, and now voicemail all on the same telephone line. Plus, remote configuration to simplify and save money on remote site installation and management. Caller ID, dial-back and password security to protect sensitive data. Flash ROM for fast,easy,flexible upgrades. And, support for Plug and Play in Windows 95.

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same reasons. Shouldn't you? For more information, call Hayes *Fax Response* at 800-HAYES-FX and select Document 966, or *Hayes Online 770-446-6336* or Hayes Worldwide Web Site http://www.hayes.com or Telnet to "hayes.com".



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#### **TECHNOLOGY UPDATES**

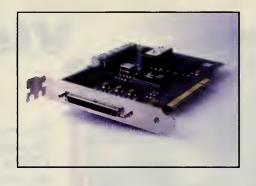
By Jim Thompson Western News Service

The new Zip drive from Iomega Corporation is one of the hottest selling new computer products.

Zip drives provide up to 100-megabytes of storage on a single Zip disk. This high capacity makes it ideal as a hard-drive upgrade with unlimited capacity, as a hard-drive backup or as a handy addition to mobile computers. Every Zip drive includes free Zip tools software for file organization and management to create a total solution that enables customers to easily organize, save, share, transport and protect computer information — from games to files, applications and entire "environments" on 100-megabyte Zip disks.

The Iomega Zip drive, a removable storage drive for computers, sells for \$199.95. The 100Mb Zip disks sell for \$19.95 each.

Contact: Iomega Corporation, (801)778-3712



QLogic Corp. has introduced the first PCI-to-SCSI host adapter cards to fully support the next generation Ultra SCSI standard and doubles traditional data transfer rates.

QLogic's Fast!SCSI PCI Ultra products deliver 40Mb/sec SCSI data transfer rate with direct connection to the popular Peripheral Component Interface (PCI) bus.

The Fast!SCSI PCI Ultra Family includes:

Fast!SCSI PCI Ultra allows a narrow SCSI bus (8-bit wide) to support 20 Mb/sec data transfer rates and delivers I/O RISC processor performance to workstations and small network servers. Price: \$395.

Fast!SCSI PCI Ultra-W brings both Fast (20 Mb/sec) and Wide (40 Mb/sec) connectivity to high performance SCSI bus applications such as servers and workstations while providing I/O RISC processor performance to manage I/O queuing capability. Price: \$445.

Fast!SCSI PCI Ultra-W/D is the family's differential version that supports cable lengths up to 25 meters for differential SCSI products at a 40 Mb/sec data transfer rate. Price: \$565.

Contact: QLogic Corporation, (800)867-7274 or (714)438-2200

++4

More than 80 percent of the nation's human resources executive directors believe that sensitive personnel data is at risk to Internet intrusion, according to an industry-wide survey conducted in the first quarter of this year.

The telephone survey, conducted by Cylink Corporation of Sunnyvale, California, polled a random sampling of human resource professionals in 21 states. The survey found that nearly 80 percent of the respondents felt their companies should increase data security in the near future. Their concern was driven by the fact that 60 percent of all human resource databases reside on the enterprise network and that 70 percent of the executives surveyed indicate that sensitive personnel records could be accessed by other departments within their own companies.

According to the executives surveyed, passwords were the most widely-used data security technique. Unfortunately, passwords have been proven to be relatively ineffective against Internet and enterprise network data security breaches. Cylink reccommends cryptographic-based information security.

According to David Morris, Cylink's Vice President of Sales and Marketing, certificate-based security techniques are almost hack-proof. "Information security systems that require a certificate — sort of an information highway driver's license that includes a person's name, access privileges and what is known as a 'public key' — will soon be the technique of choice for the information-security savvy enterprises," Morris pointed out.

Contact: Cylink Corporation (408)774-6432



The worldwide handheld computer market grew by 39 percent in 1994. Some 950,000 units were shipped and that figure is expected to reach 5.6 million units by 1999, according to a recent Dataquest study.

Dataquest estimates that the standard handheld computer market grew to 390,000 in 1994, a 59 percent jump over 1993, while expandable organizers grew to 560,000, a 28 percent jump. Standard handheld computers and expandable organizers are subsets of the larger handheld computer market.

"We believe that by the end of 1995 and early next year, we will see the emergence of cheap, ubiquitous wireless networks that drive handhelds to be much more than what they currently are: \$600 replacements for \$35 worth of paper," said Kimball Brown, Vice President and principal analyst of Dataquest's Mobile Computing program.

Hewlett Packard continued its dominance of the standard handheld market with 27 percent of the market. Sharp is still the market leader in the expandable organizer market, but Psion is clearly gaining ground.

Contact: Dataquest Incorporated, (408)437-8312

\*\*\*

NovaLink Technologies, Inc. is shipping the NovaPak 288, which combines a 28,800bps cellular data/fax/voice modem and an alphanumeric pager on a single PC card Type II (PCMCIA). At a suggested list price of \$599, the NovaPak includes an integrated data, fax, voice and paging communications software for Windows.

NovaPak automatically routes incoming calls as fax, data or voice; answers calls; stores messages; and enables multiple mailboxes, private outgoing messages and remote message retrieval. NovaModem provides V.42 LAPM and MNP 2-4 for error correction, V.42bis and MNP 5 for data compression, and MNP 10 for enhanced cellular data throughput.

Weighing less than four ounces and sized to fit into a coat pocket or purse, the NovaPak can be carried as a standalone alphanumeric pager.

NovaPak's LCD window displays incoming e-mail and alphanumeric pages which can be downloaded onto the hard drive of any computer



equipped with a PC card Type II slot (PCMCIA). Available with 128Kb of message memory, NovaPak also features dynamic memory allocation to help protect users from running out of memory space. Once NovaPak is inserted into a computer's PC card Type II slot, stored messages are automatically downloaded to the computer's hard drive, making "new" memory continuously available to the user.

Contact: NovaLink Technologies, (800)668-2546 or (510)249-9777

++4

Seiko Instruments has introduced several great new handheld devices for keeping track of personal data. The Personal Organizer, Phone Pal and Phone Pager will get you organized in short order.



The handheld Personal Organizer stores and retrieves all personal information for daily planning, including names and phone numbers, addresses with directions, "to-do" lists, class schedules, birthdays and other important data. A Global Search feature finds all entries containing an entered word or number. The pocket-size organizer also includes a built-in calculator with memory, and auto shut-off to prolong battery life. The price is less than \$20.

Seiko also offers the Phone Pal (DF-3601B), another handheld electronic device that is designed to provide easy access to frequently used telephone numbers. "By storing up to 120 names and phone numbers, the user can easily and quickly identify unrecognized phone bill charges," says a spokesperson. The unit stores and retrieves appointments, birthdays, "to-do" lists and other personal information. The price is also less than \$20.

The Pager Pal quickly identifies the name of the person beeping you. It's the best way I know of to save money on those cellular phone calls. Its search mode looks through the directory of more than 120 entries in a flash allowing you to enter the first few digits of a phone number to identify a caller. Like the Phone Pal, it includes an information organizer for storing and organizing appointments, birthdays, directions or any type of information. Price is under \$20.

All the products feature a two-line, 26-character dot matrix display and include a calculator with running total and item counter, currency and metric converter, QWERTY-style typewriter keyboard with raised rubber keys, lithium battery and carying case. I think these devices are great.

Contact: Seiko Instruments USA Inc. (800)873-4508 or (310)517-7709

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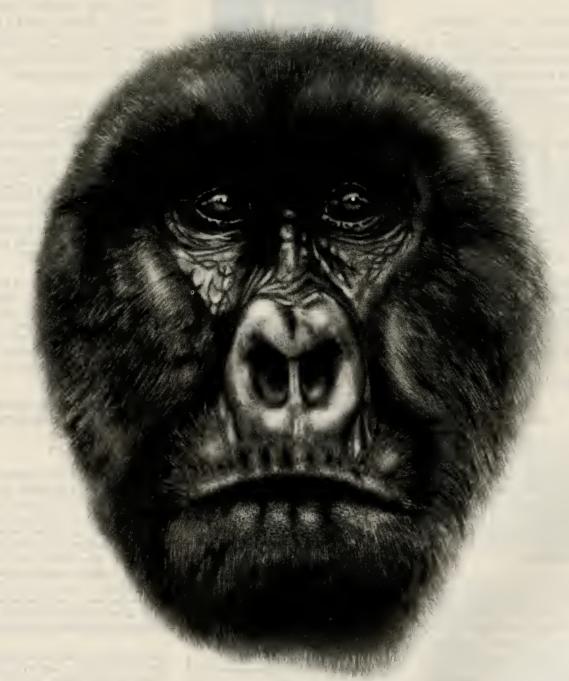
Infonet Services Corporation is offering an application-specific portfolio of INFOLAN dial IP services via a 1-800 ISDN number in the U.S. Infonet's 1-800 ISDN service provides the same high-speed throughput as a 56/64 Kbps leased line at a price that is not much more than a modem connection over convential phone lines. According to a spokesperson, it will especially benefit U.S. users of Infonet's INFOLAN Private Internet and INFOLAN Branch Office.

The company also offers ISDN access in 18 countries including Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Italy, Japan, Luxembourg, The Netherlands, Norway, Singapore, Spain, Sweden, Switzerland and the United Kingdom.

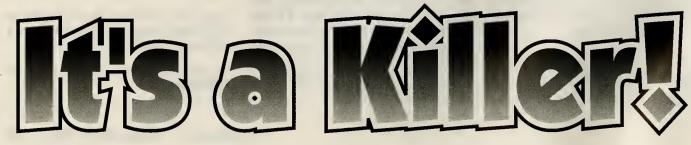
They will even assign particularly large INFOLAN Private Internet customers a dedicated 1-800 ISDN number.

Contact: Infonet Services Corporation, (310)335-2668 ◆

# MMB TEAMate UNIX®



Release 4.0



## WEB BBS

## TEAMate GUI Clients include WWW Browser

TEAMate software now contains an integral WWW browser. This means that you and your users can now mix HTML and other data within your TEAMate Bulletin Board. Forums, download libraries, upload areas, etc., can be in structured BBS format and HTML can be used where appropriate. You can mix and match as desired and even include HTML documents as email or messages. The TEAMate client automatically determines whether HTML data is present and switches to HTML mode if required. From within an HTML document you may also "jump" into BBS mode. This means that if your hypertext link goes somewhere in the BBS other than to an HTML document, the client will switch automatically to display the information, the order form, the threaded list of messages in the discussion, etc., in BBS mode.

## Your Server Doesn't Need to be "On the Internet" to use HTML

TEAMate GUI clients for Windows 3.1, Mac and OS/2 support both serial and TCP/IP access so your users can run directly connected to the Internet or with just a normal modem connection.

Since the HTML viewer built into the TEAMate client does not require a TCP/IP connection, you and your users can build HTML documents on your server and view them with the TEAMate GUI client. No Internet access is required to use HTML. Normal dialup directly to your server is all you need.

## Worldwide WEB Sites

Any HTML document within your system can "point" to a Web site outside your system and the user will be connected to the remote site. To use this feature your server must have a TCP/IP link to the Internet. The user may be running an async connection or TCP/IP.

## Full Text Indexing of HTML

One of the very powerful features of TEAMate is its built-in capability of fully indexing all of the items in the system. This feature is carried over with the HTML documents so that the HTML is fully indexed on content. Your users can do a simple full text search, pull up a list of HTML documents and then follow the links to the information they need. You can add new HTML pages to your system easily and even categorize them using the TEAMate topics, so that your users can find what they need, fast!

## Internet Access INTO Your System

If your system is "on the Internet" you can run the TEAMate WWW server module so that anyone can connect to your bulletin board via any standard WWW browser. For WWW browsers TEAMate supports user authentication using the built-in TEAMate access controls plus automatic generation of HTML for those areas of your server that only contain ASCII and graphics. A standard feature allows any WWW browser user to post items to the bulletin board after they "login" via the WWW browser using their TEAMate user name and password. All TEAMate GUI clients can be used on the Internet to directly access your server.

## FTP in TEAMate Client

The Internet File Transfer Protocol is built into the TEAMate GUI client. Users can connect to any remote FTP site that you permit and you can "script" the login procedures using the built-in scripting language. Files are transferred directly to the user's PC from the remote FTP site.

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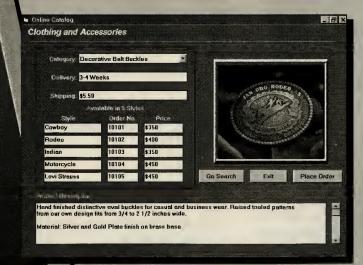
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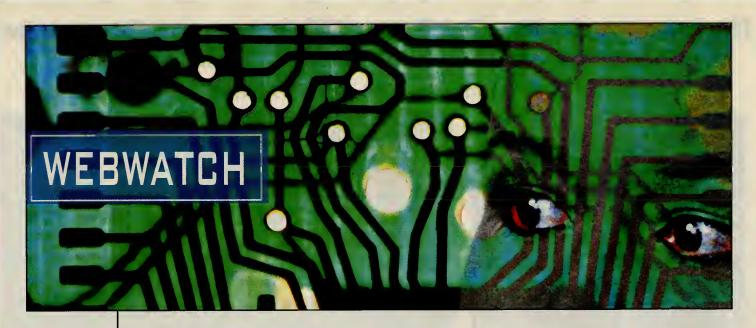


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Ric Manning writes about business technology, computers and consumer electronics for The Courier-Journal in Louisville, Ky. His weekly column called Home Tech is distributed to more than 80 newspapers by the Gannett News Service and it's available on the World Wide Web http://iglou .com/gizweb

Ric was the founding editor of Plumb and Bulletin Board Systems. two newsletters that covered the BBS arena in the early 1980s. His freelance work has appeared in several magazines including PC/Computing, Mobile Office, PC Week and Home Office Computing Ric lives in Southern Indiana with his wife, two children and a champion Weimaraner dog. You can reach Ric at e-mail:// ricman@iglou.com

## COLLEGE HOME PAGES OFFER A VIRTUAL CAMPUS TOUR

by Ric Manning

The World Wide Web hasn't put college recruiters out of business. Colleges still bombard high school students and their guidance counselors with colorful brochures that extol the virtues of campus life, and they still conduct campus tours for young people who are shopping for a college.

But an increasing number of schools are finding that having a page on the Web can be just as useful as a large printing budget. A Web page gives a college an

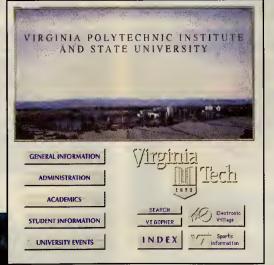
electronic front door that millions of people can enter. In an era of tight budgets and increasing competition for students, colleges are finding that a Web site can be a powerful recruiting tool.

"Our World Wide Web server - http://www.stevens-tech.edu - contains a variety of postings, some to tell the world about Stevens and about the campus community," said Leslie Maltz, director of computing resources for Stevens Institute of Technology in New Jersey.

College Web sites are also used to distribute campus services to a broader community. In Ohio, the Web is being used to give state residents access to college libraries. Other schools, including Case Western Reserve University in Cleveland and Virginia Tech in Blacksburg, Virginia, have expanded their campus networks to become community networks.

If you're looking for a college to attend, a visit to a school's Web site can be almost as helpful as a visit to the school's campus. In many cases, you'll get the same information that a school puts in its brochures

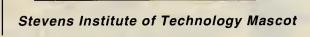
and catalogs — details about admission standards, academic programs and available degrees. But you can also look under the glossy surface and get an idea about what the students and what life on campus are like.



## DIRECTORIES OF COLLEGE WEB SITES

Where can you start your virtual road trip? Here are two good locations:

Christina DeMello maintains at http://www.mit.edu:8001/people/cdemello/univ-full.html a list of more than 1,300 college and university home pages. In addition to schools in the United States, her list includes schools in Europe, Asia and South America. The list is organized alphabetically with a search option that will take you to an individual listing.



If you don't care to roam across international borders, try http://www.mit .edu:80/world/univ.html for the database of more than 500 U.S. college Web servers maintained at the University of Texas. A helpful option lets you browse the list organized by state. And there's a separate listing of pages created by community colleges.

### **GETTING SPECIFIC INFORMATION**

Once you're on the road, you can start browsing with the official stuff. From the general menu, you can get more specific. Follow the links to pages that will tell you about individual departments or programs.

The University of Pennsylvania's http://www.upenn.edu offered details about the school's library system and the faculty's research interests and expertise. Rudolph Steiner College at http://www.io.com/~cradock/rsc-hp .html offered information about the school's Goethean Studies Program. And at http://www.wwc.edu you'll learn that the "special task" of Walla Walla College is to prepare students for world mission work through the Seventh Day Adventist Church.

Keep poking around and you'll find information that's more unusual - and often more interesting. See if there are links to home pages sponsored by campus organizations. At the University of Texas at Austin - http://www.utexas .edu - you'll learn that the campus has an Anime Club, a Cycling Team, an Aikido Club, the Ahmadiyya Muslim Students' Organization, a student radio station and the Lesbian Bisexual Gay Students' Association - all represented on Web pages.

Some of the more ambitious Web authors have created hyperlinked campus maps to give you a virtual walking tour. At Honolulu Community College http://www.hcc.hawaii.edu - and at the University of New York at Buffalo's

## HOME PAGES OF U.S. COLLEGES

	California State Polytechnic Univ., Pomona	
	Carnegie Mellon Univ	
	Case Western Reserve Univ	
	Cornell Univ	
	Duke Univ	
	Florida Inst. of Technology	
	Florida State Univ	http://www.fsu.edu
1	Gallaudet Univ	
-	Georgia Institute of Technology	http://www.gatech.edu
	Harvard Univ	http://www.harvard.edu
	Honolulu Community College	
	Indiana Univ. System	
Ì	Iowa State Univ	http://www.iastate.edu
	Lehigh Univervsity	
	Louisiana State Univ	
	Loyola College	
	Massachusetts Institute of Technology	
	New Jersey Institute of Technology	
	Ohio State Univ., Columbus	http://www.acs.ohio-state.edu
	Rensselaer Polytechnic Institute	http://www.rpi.edu
	Rochester Institute of Technology	
	Stanford Univ	
	Stevens Institute of Technology	http://www.stevens-tech.edu
	Syracuse Univ	http://cwis.syr.edu
	Temple Univ	http://astro.ocis.temple.edu
	Univ. of California at Berkeley	http://www.berkeley.edu
	Univ. of California at Davis	
	Univ. of California at Los Angeles	
	Univ. of Florida	
	Univ. of Illinois at Urbana-Champaign	
	Univ. of Massachusetts System	
	Univ. of Michigan-Ann Arbor	http://www.umich.edu
	Univ. of Minnesota	
	Univ. of Missouri-St. Louis	
	Univ. of North Carolina at Chapel Hill	
	Univ. of Oregon	
-	Univ. of Pennsylvania	
	Univ. of Southern California	
	Univ. of Texas at Austin	
	Univ. of Virginia, Charlottesville	http://gwis.virginia.edu
	Vanderbilt Univ.	
	Virginia Polytechnic Institute and State Univ	
i	The state of the s	Dah.ioittiona

http://wings.buffalo.edu you can use your mouse to click on a building and find out what's inside.

http://www.louisville.edu engineering students are translating buildone floor to another inside

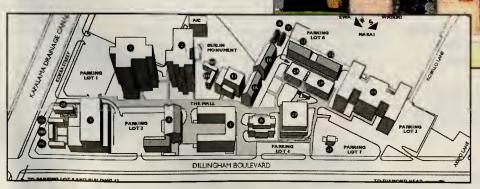
ing floor plans into electronic maps. They made their campus tour so realistic that you have to push buttons on a simulated elevator panel to move from

one of the buildings.

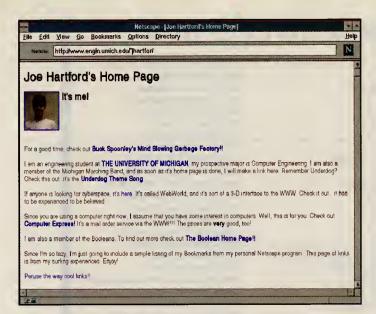
At the University of Louisville's

Putting a campus map on the Internet is a cool idea. but it works best if you're actually on campus when you view it. University computers usually have a

high-speed connection to the campus network, so the maps appear in a couple of seconds. But when you call them up from home - even with a fast modem - you may have to get a cup of coffee while the graphic files load.



Clickable maps make campus cruising Honolulu C.C. easy



### STUDENT PAGES

If you want a closer look at campus life, look for Web pages sponsored by the campus newspaper. They'll take you to recent editions so you can find out what's hot - and controversial - on campus. Hit http://www.newslink.org for a directory of college campus newspapers, as well as an outstanding collection of Web sites and gophers maintained by commercial newspapers, broadcast networks, magazines and other publishers. It's maintained by Newslink Associates at Marquette University; lead researcher Eric K. Meyer - e-mail://

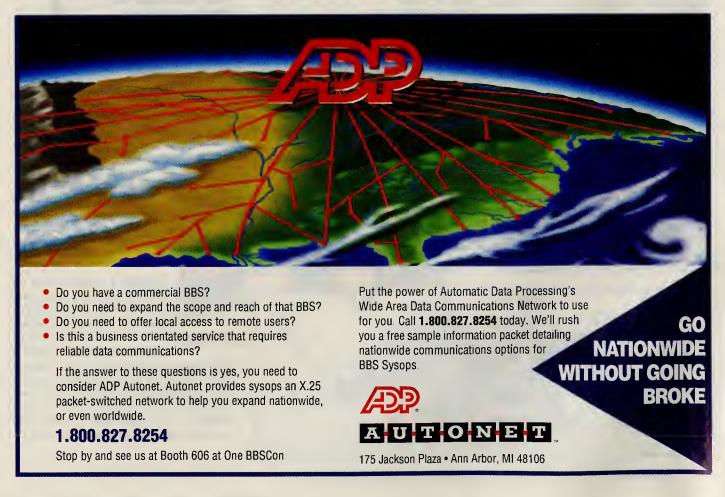
meyer@newslink.org - is one of The People to Know if you're interested in online publishing.

You can even get to know some of the students by looking up their personal home pages. Students who have their own pages are likely to be engineering or computer science majors - in other words, students who spend a lot of time using a computer keyboard and the Internet. But that's changing. As more students discover the attractions of campus networks, an increasing number want to be part of it.

Indiana University lets any student with computer privileges create a personal page if they want one, according to John Warren of the school's University Division. "Many students put their résumés online and then distribute their URL (Web address) with a letter," he said. Others use their personal home pages to list their favorite Web sites and links to their friends' pages.

At the University of Michigan, student Joe Hartford used his page to tell the world that he is a member of the school's marching band. He even put a button on his page that would produce the theme song to "The Underdog."

By browsing the student pages at the University of Illinois - http://www.uiuc.edu - you'll discover that Eileen Coscolluela likes Japanese animation, acapella music and horror novels. Bryan Donaldson listed his five favorite CDs, Reece Joyner posted a picture of himself with his true love: his motorcycle. And Nancy Rudins shared her personal philosophy on her home page: "Life is uncertain. Eat dessert first." ◆



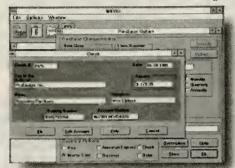


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Major Agenda is a full-featured "calendar of events" application that allows announcement scheduling for any number of date oriented events such as meetings, parties, seminars, appointments, etc.

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- \* Enter events for another client to see
- \* Enter events that only you can see
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- \* Full RIP and ASCII/ANSI interface support
- Class and key restrictions on events





CZ-fax

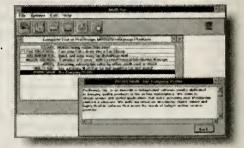
EZ-Fax makes sending fax information easier by allowing you to set up a menu command to transmit a fax document. When a user selects the command from your menu, they're prompted for

their fax phone number and the fax document is on its way! No more users lost in lists of documents or problems with command concatenation! EZ-Fax makes online faxing as easy as a keystroke! 

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Multi-Vue is a new product based on our Vue-It product. A great number of fabulous features have been added to the Worldgroup Client-side application. These features include:

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- Document to BMP file association for display
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## BABB'S BOOKMARKS by Chris Babb

First of all, "Happy Anniversary To Me!" One year ago as of this writing, I got my first Internet account. This last year has been exciting, enlightening and amazing. The best way to describe it is to relate my first experience with the Internet.

Music has always been a part of my life. For as long as I can remember, I have been listening to, playing and reading about music. Not surprisingly, music was one of the things that initially introduced me to the Internet.

July, 1994: My friend Dave Miller showed up waving an article from *Rolling Stone Magazine*. It was a little sidebar about this hot place for music on the Internet. It was called IUMA (Internet Underground Music Archives) and looked like it could be very interesting. So, with some poking and prodding from Dave, I gave Kevin Behrens (Aquila BBS) a call to see what he knew. He said "Why don't you stop over at Aquila this week and we can check it out."

Now, at this time, the only Internet access that Aquila BBS had was the typical Internet e-mail setup. But Phil Becker (eSoft Inc.) had given Kevin a phone number and some Windows Internet Client Software to see if Kevin could actually get on the Internet and make some sense out of it.

I arrived at Aquila, article in hand. Within a few minutes we were connected to an Internet Service Provider. We quickly realized there was something not quite right with the setup. Nothing seemed to work. Oops, we forgot to hit **<ESC>** after connecting with Trumpet to get the required "SLIP ENABLED" message. Chalk it up to being excited or something. After this excruciating experience, I thought we were ready to literally (or virtually) rock and roll.

I whipped out the addresses we needed and told Kevin that I had both an FTP address and a World Wide Web address. We both stopped and looked at each other. At about the same time, we both exclaimed, "What's this World Wide Web Thing?" I can now look back and laugh at this (I wonder why?) but at the time, we didn't even know that the Web existed. We didn't even have the primitive software available at that time to access it. Mosaic? Isn't that a picture made out of a bunch of tiles or something?

A couple of hours later, with hundreds of questions in mind, several files we had no idea what to do with and not very much else, we stopped and figured that we were pretty ignorant when it came to the Internet. We were able to connect to the service provider, we were able to get to the FTP address listed in the article, but neither of us knew what the Web was or what to do with an .MP2 or .AU file. My initial impression?

Well, it looks like it could be neat, but the tools had a ways to go and I had a lot to learn.

September, 1994: Aquila is about to get their very own IPAD (Internet Protocol Adapter) from eSoft. Kevin called me and said that Phil Becker was going to be in town and to be sure I stopped over to see what was going on. It took all of 30 seconds for me to drop everything I was doing and race (remember, I like speed) over to Aquila to watch this historic event unfold.

There were the normal problems associated with anything having to do with computer communications, but in the end, I now had a place to connect and the software, such as it was, to really see the Internet for myself. This was also about the time that Kevin and I finally found out just what this World Wide Web Thing was.

Phil whipped his laptop out, connected to the Internet and ran Mosaic. The first thing I saw? Metaverse, another music site (was I being told something here?) on the Web started by Adam Curry of MTV fame. I also remember Kevin and I exclaiming about how much easier our attempt in July would have been had we known about the Web. Now that I think back, maybe it was a good thing we didn't know about it. Knowing and not having is much worse than being oblivious.

My second impression of the Web? Awesome, big, cool, and how am I going to find time to play with all of this stuff? Actually, that was the easy part. I got a job doing it and writing about it. Now, if there were only 24 more hours in the day to do everything I need and want to do!

It brings a smile to my face to see how much has changed in such a short amount of time. One year ago, I didn't even know what the Web was. Now I use the Web for at least 80% of my Internet time. One year ago, Netscape did not even exist and Mosaic was still in a semi-primitive state. One year ago, the only thing that amazed me was how fast I could drive without getting caught. Now, the Internet, its capabilities and the exciting thought of where it will all eventually lead, consumes my thoughts and occupies most of my time.

I was blown away by the sheer number of music sites and the volume of information, sound bites and excellent graphics that are available. To make matters worse, I actually broke the Netscape Bookmark Editor while trying to add everything I found. I hate it when that happens. So, if you're ready for a musical adventure, all you need is your favorite browser, configured with players for .WAV, .AU, .MP2 or .RA, a decent soundcard and speakers, a pile of time and a good cushion for your chair. Also, if your other half gripes about the noise coming from your computer room, I can recommend some excellent earplugs for them.

Chris Babb is a Senior Systems **Engineer for Control** Masters, Inc., a Systems Integrator located in Downers Grove, IL, where he designs industrial automation software by day. He's a member of the Aquila BBS/Internet Team by night. Chris has worked with Aquila since 1990 and currently handles technical support, Web design and construction, Internet training and various other online and offline duties. In his meger spare time, Chris enjoys music, playing bass guitar, the outdoors and his kitties. You can reach Chris via e-mail://chris .babb@aquila.com

## **BABB'S BOOKMARKS - SEPTEMBER, 1995**

## **IUMA - INTERNET UNDERGROUND MUSIC ARCHIVES**

http://www.iuma.com/



This is my favorite Web site of all. Stunning graphics, a well planned design and lots of music. This site was started in an attempt to bring the work of undercapitalized (dead broke), unknown musical artists to the world wide market of the Web. When I first found

out about IUMA, I saw the potential and have been elated at the progress and direction that IUMA has taken. Besides the great graphics and outstanding implementation of this site, the music is excellent. I have enjoyed many artists whose work would otherwise have been relegated to the underworld of homebrewed cassettes and photocopy inserts. IUMA currently claims over 600 independent artists online and over 250,000 hits per day.

This site was designed for ease of use and the ability to find what you want quickly. From the clickable graphics located everywhere, to the list boxs filled with artists and record labels, everything IUMA has to offer is within a click or two. The Guided Tour is well worth the ride; it will give you a complete overview of everything IUMA has to offer. One dominant aspect of this site is the advertisement graphics for IUMA's sponsors on all of the main pages. Complete information on how to become a sponsor is available from the main page.

So what does IUMA have to offer?

The Bands: Over 600 bands representing countries around the world and every style of music from Acapella to Pop to Weird. All are selectable by location, genre or the name of the Artist. Each of the Artists represented has a picture or graphic, a description and short excerpts in either .AU or .MP2 format. The .AUs play well through the Netscape audio player and I use the Xing Audio Player for the .MP2s. For the best in audio pleasure, you'll want the .MP2s.

Just click on the name of a band and you'll be whisked to the corresponding page with even longer excerpts and full length cuts of their work along with other information such as where to order a copy of their work. Be prepared to do other things while waiting as some of these sound files can be upwards of 6Mb long.

The Record Labels: Access to the Record Labels working with IUMA is available from a pulldown list. All of them have their own pages listing information on the companies along with links to the Artists they represent and a variety of other information. I counted 20 different labels that include such notables as Warner Bros. and Windham Hill.

The Trade Publications: Various music publications are available from another list and include at present, 7 music publications on the Web.

Also of interest are the lists of **MBONE** events that are coming up, new Artists and Labels, Internet radio broadcasts and much much more. An interesting extra is a bookmark index to the entire IUMA site. By saving the source file for this

page, you can import it directly into your bookmark file and voila, IUMA at your fingertips. Excellent idea. I hope others will follow.

Overall, one of the sharpest and most interesting sites on the Web. Don't miss it.

### **SONY MUSIC**

http://www.music.sony.com/Music/



Sony has hundreds of our favorite performers signed with them: Michael Jackson, Soul Asylum, Korn (Aquila's favorite), Jeff Beck, Kate Bush, and Pink Floyd to name just a few. When thinking about these performers and knowing what they have done with sound and video, my fondest wish is for this same excellence here on the Web.

Almost every artist currently signed with Sony has a spot on this Web site. The Artist Info page lists them in alphabetical order or by genre. A click on a name will take you to a page that may have an album cover or just information relating to an Artist. Some have further information and/or suprises that await you. For example, clicking on Pink Floyd will net you a nice graphic with links to album information, a Pink Floyd Discography, a promotional QuickTime video and press releases.

The Featured Artist Page highlights Artists who have something new in either an album or Web page. If you want to know what is new with Sony, be sure to click on WireTap.

One of the more useful links takes you to the Sony Vault. This archive is updated on a monthly basis and contains all of Sony's current CDs and Tapes that are in production. Also available is a new set of MiniDisc and Video Catalogs. If you like, you can download the entire 500K catalog. I was amazed at the list of albums currently available. I was also dismayed to see that a few of the albums I need on CD are not being made anymore. But then again, I'm sure I can find them somewhere on the Web.

Sony has collected all of the sound and video clips from the individual Artists' pages into the Multimedia page. From here you can listen to sample cuts from different Artists in .WAV, .AU, and .AIFF formats. The Netscape Audio Player will handle all of these formats and most of these samples are under 1Mb so you won't have to wait too long. Video samples are available in QuickTime format and are all 1Mb or smaller. When you add the electronic press kits and screen savers found here, you have another several days of browsing ahead of you and lots of entertainment value.

## STROBE MAGAZINE

http://www.iuma.com/Strobe/



I started to have a seizure from the really cool strobeflashing effect incorporated on this page. The first thing I had to do was see how they were making this happen. When I clicked on

Netscape's View-Source option the strobing effect quit. I also saw: <META HTTP-EQUIV="Refresh" CONTENT=2>

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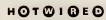
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## If you can use this,



A successful bulletin board has to be easy to use. Although the one pictured above is about as user friendly as you can get, the manufacturer left out a few of the key features you might need to get up to speed on today's information autobahn.

At Searchlight, we help you bridge the gap with BBS software that puts the emphasis on "easy". Our built-in GUI gives your callers the kind of intuitive interface they already understand. Information browsers make it easier than ever to select, view and download messages and files. Because we use the non-proprietary RIPscrip protocol, callers don't need a special client program to call your BBS. They can

use any RIP or ANSI compatible terminal. And Searchlight is the world's only BBS software that gives you a local RIP interface—so you can see and use graphics on *your* computer (or any computer on your LAN).

But don't let our good looks fool you. Unlimited message and file databases, seamless Internet compatibility and a built-in DOS doorway are just some of the features that make Searchlight powerful BBS software. And Searchlight supports RIPscrip 2.0, the new multimedia language from TeleGrafix that lets you incorporate JPEG images and digitized sounds into your BBS quickly and easily.

## you can use this.



Since running a user friendly BBS system shouldn't be hard to do, Searchlight makes your job easy, too. From a simple install program that automatically configures your modem, to mouse driven Sysop tools and menu editors, you can set up a custom BBS in just minutes. If you need help, the best technical support in the industry is just a phone call away—and it's always free.

We even make it easy to try Searchlight. Our fully functional test drive does everything our regular product can do—we even include our complete manual on disk. To get your free copy, or find out more about Searchlight, call us today. And let us start making life easier for you.

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Fax: 216-631-9289

Ah ha!, refreshing the screen every 2 seconds. Beautifully simple and extremely effective. From here, I quickly clicked on the only link on the page and was whisked to the STROBE index.

Strobe is one of several e-zines on the Web devoted to music. Strobe was founded in March, 1993, focusing on new music and modern culture in the L.A. Music scene. They also go to great lengths to cover artists they feel we should know before we are bombarded with all of the hype associated with breaking bands. This site, like many others, is best viewed with Netscape although there is a textual table of contents for the graphically impaired.

From the main page are links to

- Speed Read notable quotes from the music world with links to the original articles that these quotes were culled from
- Bandwagon interviews with various bands such as Primus, All and Deep Forest (one of my favorites)
- The Great Unsigned more interviews with as of yet unsigned bands
- Columns tons of interesting tidbits on what is really going on behind the scenes
- Reco(rd)mmendations Strobe's record reviews of which I counted no less than 16

One of the more humorous things on this site is the Stupid Net Tricks page. For a moment, I thought I had found Flippy, the Flipping Chihuahua. This cute little doggie is put through its paces by using some very simple abilities of the browser. Some of them are quite funny and it just goes to show you how creative someone can be. You'll notice this little Chihuahua all over the place so be sure to give it a click.

VH1

http://here.viacom.com/vh1/



To me, VH1 is the premier video music station on cable. For some reason, it just seems to be more suited to an older, wiser generation of people. This site has outstanding graphics and a host of useful information on videos, shows and music news. You can also find tour

dates, bios and other features related to the music scene.

From the main page, you can select from a host of links that will take you to things like the VH1 Honors page. This page highlights 8 artists who have contributed more than just music to the world. There is a complete rundown on this special VH1 event along with bios and videographies on each of the artists chosen to receive this award. There is also a link to a multimedia library that should be complete by the time you read this and a link to information on the charities to which these performers have given so much. Don't forget to checkout the special Honors contest where you can register for your chance to win valuable VH1 products.

A link to Inside VH1 will present you with highlights of special presentations and the complete VH1 broadcasting schedule. The VH1 Music Wire will give you music information; everything from concert information to indepth interviews to VH1's new advertising campaigns.

This is an extremely polished site that we can look forward to watching grow over the next few months. If this site ends up being anything like the broadcast, we are in for a special treat. Be sure to check it often and make sure you click on the "New" button to get all the latest VH1.

......

MTV

http://www.mtv.com/



I have always loved MTV. I especially love Bevis & Butthead. This is my kind of cartoon: loud; brash; controversial and totally disgusting. Why wasn't this stuff available when I was a kid? I also love the graphics used for their specials and advertising. So, when I found this site, I was expecting nothing less

than to have my eyes falling out of their sockets in awe at the amazing graphics I would see. Well, it wasn't as eye-popping as I expected and I didn't find all that I thought I would. But it is MTV and I felt it was interesting enough to include here.

This site is still under construction. (Sometimes I feel like it must be summer 365 days a year on the Web, with all this road construction going on.) The current format doesn't really cover music; it's about "MTV Oddities," a new animation series featured on MTV.

There are 3 links from the main page. MTV Oddities will take you to a page that allows you to view animated sequences from many of MTV's animations. All of the files are quite large, so unless you have a T1 coming into your house, be prepared to browse while downloading. (Thank goodness for Netscape.)

Also available from the homepage are a pile of Bevis & Butthead pictures, animations and sounds to tickle your funnybone. Another link will take you to the MTV Beach House, located on Malibu Beach. MTV will be broadcasting from this wonderful spot throughout the summer. The pictures, the Beach House Diary, VJ's and other celebrities will be available online for our pleasure.

This site currently seems to lack what MTV is most famous for, the music. I expect this to change over the course of the summer.

## MICHAEL HAUBEN'S NETIZEN'S CYBERSTOP MUSIC PAGE

http://www.columbia.edu/~hauben/music.html



Michael Hauben graduated from Columbia College of Columbia University with a BA in computer science. He is also the editor of *Amateur Computerist Newsletter*, dedicated to support for grassroots efforts and movements like the "computers for the people movement" that gave birth to the personal computer in

the 1970's and 1980's. Michael also maintains the most complete listing of musical sites on the Web. Dave Hakala, my Editor At Fault, sent this address over to me back in May. When I finally took a look at it, I was convinced that this was pretty much the definitive source for everything music.

The "Ever Expanding Web Music Listing" is a page so full of links to music sites that I could have listed this one site in this article and been done with it. This massive collection of links includes bands, fan pages, musical e-zines, music review sites, musical mailing lists, digitized and electronic music available on the Web, record labels, information about local New York music festivals and other musical events, radio stations, radio program playlists, other music link collections almost as big as this one and on and on and on. I know that by the time I completely go through this list and inhale all of the information, sights and sounds available, I will have a new kind of suntan from my monitor, my limbs will be weak (except for my mouse hand), the leather on my chair will have bonded to my skin, my friends will have new friends, and my kitties won't recognize me. But, I will be a virtual expert on all that the Internet has to offer in the way of music. Will it ever end?

GIBSON U.S.A.

http://www.gibson.com



Anyone familiar with music has either heard of or seen something Gibson. I myself have owned many Gibson products and have always marveled at the superior workmanship and unequaled sound that emanates from them. I was just fooling around one day and happened upon this site.

This site claims to be the first musical instrument manufacturer to provide product information and customer support via the Web. Whether it is or not is irrelevant. This site has more interesting information and educational material for the new and experienced musician than I thought I would ever see.

From the main menu, you can see what is new at Gibson; information on the Restoration and Repair Shop, the Epiphone Catalog, employment opportunities and a virtual birthday card to the legendary Les Paul himself are all ready and waiting for your perusal. You can also get to an online catalog of all that is Gibson: Oberheim, Dawn, Epiphone, Tobias and Gibson Wear to name a few. All of these pages have links to more extensive information on all the products along with pictures of everything they sell.

Sights and Sounds will take you to more pictures of Gibson products and sound files of what the leading users of their equipment have to say about the quality of the products they use. The Gibson Education link will take you on a worldwind tour of the making of the Gibson Nighthawk, the virtual guitar clinic, information of how to buy an electric guitar and information on how to make adjustments to your instrument.

This is an excellent source of information for everything Gibson and anything a Gibson owner needs to make the most of their instrument or a potential buyer needs to make an informed buying decision.

### **NUTSITE® OF THE MONTH**

This site was submitted by Ms. Schelle Buchholz who works for Rational Data Systems in Marin County, California. Schelle is one of the many readers who left me a Nutsite on my guestbook. Little does she know that I decided to use another site from her Nothin' But Fun page because it just seems to fit the spirit of this article a little better. My thanks goes out to her for this site and for the many enjoyable hours we have spent typing back and forth. She is a sweetheart.

### **SOUND BYTES: WWW TV THEMES**

http://ai.eecs.umich.edu/people/kennyp/sounds.html

My friends and I all seem to love reliving old TV shows. I can't remember how many times during band rehearsal that we broke into some old theme song on the spur of the moment. I can remember this \$100 bet I could have won if I had known about this page. Oh well, hindsight is 20/20 as they say. Now this site, published by Patrick G. Kenny, does not fall into the category of nutty the way others have, but I know from personal experience, that you have to be nuts to want to collect some of these gems.

This site is filled to the brim with more TV theme songs than I ever knew existed. Comedy, Drama, Action and Adventure, Sci-Fi, Network Themes, Children's shows and a host of other categories gives even the most authoritative trivia buff something new. Within each category is an alphabetical listing of shows. A simple click will bring you Monty Python's Flying Circus, The Adams Family, Love American Style, I Love Lucy, That Girl, CBS's - 60 Minutes , ABC's Wide World of Sports, Cosmos, Space 1999, All My Children and hundreds more.

There's a compilation of Homer Simpson saying "DOOH" or "Mmmmm" 20 or 30 times (a great answer for an unsuspecting answering machine), Data from Star Trek TNG reading some poetry that was even worse than the Vogon Poetry in *The HitchHiker's Guide to the Galaxy*, Bones saying "He's dead Jim" from all different angles and of course, Scotty telling the Captain that "I can't give 'er any more!"

All of these sound files are 1 mb or under and use the Netscape Audio Player. Have fun with this one.

With so many Web sites devoted to music, I have decided to post all of the sites left over after this writing on my Web site. You will find them along with all of my past articles. They are always a treat and there is always something new. Click (or type) your way to:

http://www.aquila.com/babbs.bookmarks/

I am still looking for reader-submitted sites, people! If you have a site you feel should be featured here or is a candidate for my NutSite of the month or any comments in general, I'd love to hear them. Feel free to enter them on my guestbook or e-mail me at:

chris.babb@aquila.com

## UBLISHING ON THE WEB by Michael Erwin

## PART 8

Tell I see that you have made it back for more extensions to HTML. Are you a glutton for punishment or what? Thought so. In this month's article, we are going to cover HTML Tables. Just a word of warning. This area of HTML is still under development as "proposed" HTML Specification v3. So wear your hard hat! Let's get to it shall we?

Fire up your favorite text editor. Currently, mine is IBM Works for OS/2. It really doesn't matter which editor you use as long as it saves the text in ASCII. Let's work through some examples of tables.

The table extensions we will be looking at may or may not be rendered in your browser. For example, I will be using Netscape Communication's Navigator browser v1.2. For more information look at http://www.netscape.com/

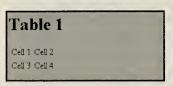
The first new tag we will use is the **<TABLE>** tag. This tag, along with its closing tag **</TABLE>** tells your browser where a table starts and ends. So the browser will try to render anything between these two tags as a table. But you need a number of additional element tags and attributes to really use the <TABLE> tag.

Look at the following HTML code:

```
# This code renders a plain table; see Table 1, Figure 1
<TABLE:
         <TD>Cell 1</TD> <TD>Cell 2</TD>
         <TD>Cell 3</TD> <TD>Cell 4</TD>
    </TR>
/TABLE>
```

```
# This code renders a bordered table; see Table 2, Figure 1
<TABLE BORDER>
    <TR>
        <TD>Cell 1</TD> <TD>Cell 2</TD>
    </TR>
    <TR>
         <TD>Cell 3</TD> <TD>Cell 4</TD>
</TABLE>
```

The tag **<TABLE>** tells Netscape that a table is starting. <TR> tells the browser to start a Table Row and </TR> ends the row. The <TD> tag is rendered as Table Data, with a ⟨TD⟩ to stop the cell. This is a nice way to display text in a table format. Nothing real fancy yet, so we will add a table attribute to this tag. In the following example code, I have turned on the BORDER attribute. This has a nice effect on the table shown in Figure 1 (below).



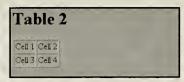
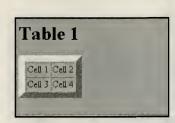


Figure 1:Plain & Bordered Tables

OK, time to spice this table up with some other attributes. The border can be set to various widths. Try changing <TABLE BORDER> to <TABLE BORDER=10> in your test document. Save your test document, and reload the test document into your browser. (See Table 1 in Figure 2 below.) Increase the value to 50. Save the document and reload. Changing the size of the border adds emphasis to the table; see Table 2 in Figure 2.



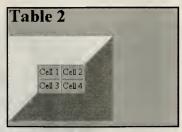


Figure 2: Emphasized Table Borders

For a finer control of the spacing of data in those table cells, Netscape includes **CELLSPACING** and **CELLPADDING** attributes. CELLSPACING is the space between the individual cells in a table. CELLPADDING is space between the border of the cell and the data located in the cell. Change <TABLE BORDER=10> to <TABLE BORDER CELLSPACING=10 CELLPADDING=10>. Save the document and reload. (See Table 2 in Figure 2.) Try changing the values of CELLSPACING and CELLPADDING to get different results. Go ahead and try it. I will be waiting right here.

When you do not specify CELLSPACING or CELL-PADDING, the browser defaults to CELLSPACING=2 and CELLPADDING=1.

With all of the above in mind, what do you think <TABLE BORDER=0 CELLSPACING=0 CELLPADDING=0> will do? These values will create the smallest possible table. Why would you want to do this? I don't know either. Let me know when you develop a good example. But we both know if you couldn't do it, everyone would want to do it.

Okay, let's try some more table attributes. Look at the following 3 examples:

```
# Example of row-spanning code; see Table 1, Figure 3
<TABLE BORDER>
        <TD ROWSPAN=2>Cell 1</TD>
        <TD >Cell 2</TD><TD>Cell 3</TD>
        <TD>Cell 4</TD> <TD>Cell 5</TD>
</TABLE>
```

```
# Example of column-spanning code; see Table 2, Figure 3

<TABLE BORDER>

<TR>

<TD COLSPAN=2>Cell 1</TD><TD >Cell 2</TD>

</TR>

<TR>

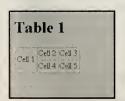
<TD>CEll 3</TD><TD>Cell 4</TD><TD>Cell 5</TD>

</TR>

</TABLE>
```

Did you notice the attribute **ROWSPAN=2**? We are telling the browser that the data Cell 1 covers two rows starting with the first row. Since we have defined only two rows with **<TR>** and **</TR>** tags, it was rendered as Table 1 in Figure 3 below. Try moving the **ROWSPAN=2** to different Table Data **<TD>** tags.

Well, since we can link multiple rows together, can we link columns together? As the guy in that fancy mustard commercial says, "But of course," if we use ROWSPAN to link rows. We use COLSPAN to link columns. Look at the middle example in Figure 3. The combination of ROWSPAN and COLSPAN allows some pretty fancy tables, as Table 3, Figure 3 shows.





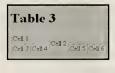
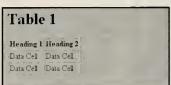


Figure 3: Examples of ROWSPAN and COLSPAN attributes

What if we want to make one of the table cells a header for a column or row of data? This is a simple little tag. We want to change Table Data <TD> to a Table Header, so we change the <TD> (Table Data) tag to a <TH> (Table Header) tag. When we use a <TH> our cell data is centered and bold. Take a look at this HTML code example:

```
# Multiple-level headers using COLSPAN; see Table 2, Figure 4
<TABLE BORDER>
    <TR>
         <TH COLSPAN=2>Head 1</TH>
        <TH COLSPAN=2>Head 2</TH>
    </TR>
    <TR>
         <TH>Head 3</TH> <TH>Head 4</TH>
        <TH>Head 5</TH> <TH>Head 6</TH>
    </TR>
    <TR>
         <TD>Data Cell A</TD> <TD>Data Cell B</TD>
        <TD>Data Cell C</TD> <TD>Data Cell D</TD>
    </TR>
    <TR>
        <TD>Data Cell E</TD> <TD>Data Cell F</TD>
        <TD>Data Cell G</TD> <TD>Data Cell H</TD>
    </TR>
</TABLE>
```

Now look at Table 1 in Figure 4 (below) to see what the "one-header" code above does. It slightly changes the appearance of the contents of that cell and aligns the contents. We can even do multiple level Table Headers with COLSPAN or ROWSPAN attributes; see Table 2, Figure 4 and the "multiple-level headers" code above.



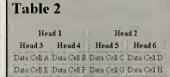


Figure 4: Examples of Table Headings

You can put a Table Header tag anywhere. Matter of fact, we can put all of these tags and attributes together to create a HTML table like this:

```
<TABLE BORDER>
<CAPTION ALIGN=bottom>Sprockwell's Sprockets & Cogs, Inc.</CAPTION>
    <TR>TD>TH ROWSPAN=2>/TH>
        <TH COLSPAN=2>Sales</TH></TD>
    </TR>
    <TR>
        <TD>TH>Sprockets</TH>TH>Cogs</TH>/TD>
    </TR>
    <TR>
        <TH ROWSPAN=2>Alloy</TH><TH>Chromium</TH>
        <TD>225</TD><TD>267</TD>
    </TR>
    <TR>
        <TH>Platinum</TH><TD>16.2k
        </TD><TD>11.05k</TD>
    </TR>
</TABLE>
```

Did you get that? Look at Figure 5 (below) to see how the HTML code shown above will be rendered. Now that's what I call a way cool table!

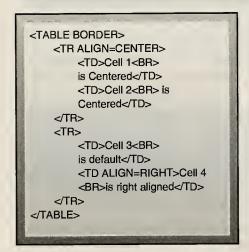




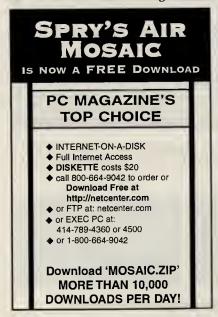
Figure 5: Adding Captions to Tables

Notice that I put a new tag into the table. The tag <CAPTION ALIGN=BOT TOM> puts the company name below the table. We would have used <CAP TION ALIGN=TOP> to put the company name above the table. (See Table 2 in Figure 5.) Go try that tag in your HTML documents. Now that we have seen this, let's see how to put some more finishing touches on your tables.

Remember a few paragraphs back, we introduced the Table Header <TH> tag. I said that the tag changes the appearance and alignment of the contents of the cell. We can use the attribute ALIGN with the Table Data <TD> or the Table Row <TR> tags to change the alignment. If we use a tag like this:



The entire first Table Row is centered with the <TR ALIGN=CENTER> code. Since we didn't specify an alignment in the second row, the Table Row alignment is default, which is ALIGN=LEFT. But in Cell 4, we told the browser to align the Table Data to the right, with <TD ALIGN=RIGHT>. See Figure 6.



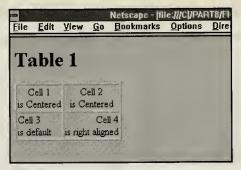


Figure 6: Effects of the ALIGN attribute

The attribute VALIGN tells the browser how to vertically align the contents of a cell or a row. The options for VALIGN are TOP, MIDDLE and BOT TOM. If you change one of the Table Row <TR> tags to <TR VALIGN=TOP>, the client's browser will render all data in the cells of that row as vertically aligned to the top of the page. Go ahead and try these new tag attributes in your HTML document.

Now here is your homework for this month. I want you to try to do a *nested* table. That is a table inside the cell of another table. Once you figure that one out, try changing the WIDTH of the cells. And if you get through that stumper, see if you can place a graphic image inside of a table cell. With some finesse, you could create a great looking button bar.

I know that last month's column and this month's go against my advice to avoid creating HTML documents that can only be rendered with specific browsers. But I thought we would explore some of these cool new extensions so you would be ready to use them when HTML Specification v3.0 is finally released. With that said, I think that we are just seeing the beginning of a LOT of new features or extensions that will be added to browsers.

## **CHILD-PROOFING WEB PAGES**

I have an open recommendation for the current crop of browser software houses: create an "OVER 18" element or tag. This tag would be placed in the top of the HTML document somewhere. It would impart a self-policing aspect to WWW documents. When a viewer's browser encounters this tag, it will ask the viewer for a "permission" password or lock them out of those pages altogether.

This "permission" password would be stored, encrypted of course, somewhere in the client's browser settings when installed. Once the "permission" password is installed it could not be changed without knowing the currently installed password. I know this is going to bring up a bunch of questions. But this would give us an option to counter those wanting to pull Web access out of schools and other places where kids can get to the mature audience URLs.

One more thing before we leave this month. I have been getting some e-mail asking for my recommendations on any HTTPD & HTML reference books. Well I have been giving that some thought. In all honestly I mainly use one great book, O'Reilly & Associates' Managing Internet Information Services. ISBN 1-56592-062-7. This book covers much more than HTTPD & HTML, it also covers an introduction to TCP/IP, Mailbased services, FTP, WU-FTP, Telnet, Finger, Gopher & WAIS.

Besides O'Reilly's book, I use information found on the net, since some features of HTML or webservers are changed more often than a baby's diaper. Most HTML reference manuals are out of date when they go to press. Even though most of the basic stuff has been the same for quite some time. I always frequent http://www.yahoo.com/ Computers/World\_Wide\_Web/ . By skimming this site, I seem to always find some new URL that covers something new and cool. Matter of fact, why don't you send me your favorite Web Master resources and I will start covering or including the best of them. Till next month...

mikee@access.mountain.net



### CORRECTIONS

Double apologies to Graham Nash of "Crosby, Stills, Nash & Young:" first, for consciously mangling the lyrics of his song Teach Your Children in the story "Tony:// eyes.of.a.child.edu" (August 1995) and second, for mistakenly attributing the song to "Seals & Crofts." I should stick to countrywestern artists. — David Hakala, Editor at Fault.

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## Learn How Interactive Multimedia Can Expand Your On-line Experience

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**TAPI Client** – provides a link to the Windows Telephony Application Program Interface and a mechanism for ISDN, X.25 and other connectivity.

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8 Pack Node Increase	\$199	\$49	\$65	4th qtr. '95
UUCP Client (dial-up)	\$149	\$37	\$49	4th qtr. '95
Internet Clients (Telnet, FTP, WWW, UUCP, IRC)	\$799	\$199	\$265	4th gtr. '95
MAPI Client	\$799	\$199	\$265	Early '96
SQL Database Client	\$799	\$199	\$265	Early '96
Reports Client	\$149	\$37	\$49	Early '96
Billing Client	\$149	\$37	\$49	Early '96
CODE Development Language & IDE	\$149	\$37	\$49	4th qtr. '95
BBS Source Code	\$799	\$199	\$265	4th qtr. '95
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Although the BBS on the CD will be operational, it is not intended to be used as a commercial BBS because it will not have completed testing nor will it include full printed documentation. Each CD contains Annihilator M16 plus all modules available in 1995. Some modules, including the Graphical Remote Client are not yet completed, this value of available electronically to Preview purchasers as they are completed. This Preview CD requires either Windows 95 or Windows NT v3.51 for operation. © 1995 Mustang Software, Inc. All names are trademarks of their respective companies.

## **BOOK REVIEWS**

by David Hakala

Creating Cool Web Pages With HTML

by Dave Taylor ISBN 1-56884-454-9, 244 pages \$19.99 U. S.; \$27.99 Canada 1995, IDG Books (800)434-3422 or (415)655-3000

Buy this book if you have any interust in writing your own HTML documents. Whether you are bored to tears by programming (as I generally am) or scribble structured code on birthday cards, Taylor will grab your attention, teach you hundreds of HTML tricks and make you a Webmaster in spite of yourself. The book covers everything from "What Is a Web Page?" to the advanced uses of image-maps, forms, Netscape HTML extensions and CGI (Common Gateway Interface) programs. A diskette includes EINet's WinWeb browser and sample "cool pages" of Taylor's design.

The chapters are well organized, making the book an excellent quick-reference guide. Each begins with a clear statement of what you will learn and why you should bother; illuminates the subject with short paragaphs, code listings and illustrations of the code's results; and concludes with a summary that includes a table of tags and other elements. Taylor makes the technical data meaningful (therefor memorable) with commentary on the history and practical uses of ftp, password protection and other elements of HTML programming.



The first nine chapters deal with programming issues. Taylor covers the various types of URLs and how to use them; basic HTML layout and text formatting; text styles; lists and special characters (accented and reserved characters); pointers and hot links; "jump" links in tables of contents and external documents; jazzing up Web pages with images, text alternatives for non-graphics browsers, images from the Internet, transparent colors, audio, video and other multimedia files; Netscape extensions for character, paragraph and image formatting.

Chapters 10 and 11 share Taylor's unique marketing expertise. (He's the founder of the highly successful Internet Mall.) In Chapter 10, the reader learns how popular search engines such as Lycos, Yahoo! and Webcrawler work, how to register one's site with these "hot spots" and how to provide index information that will help your market find your site. Chapter 11 includes tips on announcing your site, getting listed on other "cool site" indexes, getting into business-only registries, buying ad space on hot sites and taking advantage of site-announcement mailing lists. Chapter 12 peeks into the future of HTML and the uses of image-maps, CGIs and other advanced elements.

Taylor has given much to the Internet community, including the ELM mail reader and the EMBOT autorespond mail program. This book is another great gift to Web-weavers of all experience levels. ◆

## Customer Loyalty: How to Earn It, How to Keep It

by Jill Griffin ISBN 0-02-912977-X, 203 pages **\$23.00** 1995, Jill Griffin Simon & Schuster, **(212)698-7000** 

The eye-opening concepts in this book are applicable to any business, from online services and magazine publishers to mom-and-pop grocery stores. Griffin argues that satisfying customers is not enough to keep them buying from you. Customers who rate themselves as "satisfied" still switch suppliers at will and buy related products from numerous vendors. The overall goal of customer service is not customer satisfaction but customer loyalty. Griffin defines a loyal customer as one who

- "(1) makes regular repeat purchases;
- (2) purchases across product and service lines;
- (3) refers others; and
- (4) demonstrates an immunity to the pull of the competition."

The majority of the book is devoted to dozens of case studies and strategies for building such a clientele.

Most businesses, according to Griffin, waste their resources pursuing firsttime buyers, the least profitable kind of customer. The drive to increase "market share" leaves little money or time for cultivating loyal, profitable customers. She specifies in useful detail how sales teams can winnow the vast population of prospects to obtain the golden grain of qualified prospects - people who are most likely to become loyal customers as opposed to money-losing one-time buyers. The first purchase is only the start of the loyalty-building process. Griffin covers the entire gamut of techniques for getting repeat purchases, increasing one's "share of the customer" by selling related products and services, encouraging referrals of other loyaltyinclined customers and establishing both emotional and price-saving barriers to defection.

Even a "lost" customer is more profitable than a new one. First, it is easier and less expensive to regain a lost customer's business than it is to get a firsttime buyer. Cold calls yield about 1 buyer per 50 contacts. But simply calling inactive buyers - those who haven't bought from you in more than a year — yields as many as 25 sales per 100 calls. Regaining a lost customer's business also stops the invisible losses that negative word-of-mouth "advertising" can cause. Because customers seldom defect on the basis of price, it usually is unnecessary to cut profits in order to regain lost customers. Griffin specifies seven proven ways to regain a disgruntled customer's business without cutting prices.

If you feel threatened by upstart competitors, discouraged by customer turnover or frustrated by stagnant revenue growth, *Customer Loyalty* is a must-read — and a must-do! ◆

## **BBS Software & Hardware**

## This Month's Specials

## **GALACTICOMM**

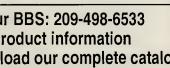
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## TECHNOLOGY FRONT

by Jim Thompson Western News Service

## ONLINE SYSTEMS "STRUT THEIR STUFF" AT ONE BBSCON

This year's ONE BBSCON in Tampa, Florida (August 16-20) promises to be the most important gathering of the online community to date. The explosion of the Internet and the World Wide Web coupled with the "discovery" of the power of online systems by corporate America combine to make this THE show of the year.

Central to the expansion of the communications universe are the BBS software developers. We asked all of the BBS system developers and providers who will be at ONE BBSCON to provide us with a preview of what they will be unveiling at the show. The list was limited to those companies which offer BBS and/or client/server programs.

It should be noted that every attempt was made to contact all BBS software developers who will be at ONE BBSCON. Those who responded within the specified deadline are represented in this article. The exhibitors are listed alphabetically.

DURAND COMMUNICATIONS NETWORK, INC (BOOTH 745)

DCN will be showing Mindwire, its Windows 3.1 and Windows NT client/server system for interactive multimedia applications. Mindwire allows users to connect via the Internet, private networks, or by direct modem dialup.

According to a company spokesperson, "with the release of Mindwire, DCN has made it clear that they feel the future of online systems lies in easy to create, easy to use, smoothly scalable client/server multimedia online systems which leverage Windows clients and NT servers.

"1996 will see industrial strength MindWire Servers running on DEC Alpha systems and accommodating thousands of simultaneous connections. DCN's experience in photograph databases, combined with their new client/server strategy has created a truly comprehensive database strategy for MindWire which harnesses the full power of SQL, MS Access, dBASE, Fox Pro, Oracle or Paradox databases."

DCN recently finalized an alliance with eSoft, Inc. which will reportedly result in an integration of Mindwire with TBBS and the Internet Protocol Adapter (IPAD). At press time, it was not clear exactly what form this "integration" will take. More details will be available at ONE BBSCON.

MINDWIRE Durand Communications Network

147 Castilian Drive Santa Barbara, California 93117

Tel: **(805)961-8700** BBS: **(805)961-8702** 

e-mail://sales@durand.com http://www.durand.com

eSOFT, INC. (BOOTH 301)

eSoft, Inc. will debut what is termed "its new unified product strategy" at ONE BBSCON. According to Phil Becker, President of eSoft, Inc., "this unified strategy will integrate our original product, TBBS, with our new product The Internet Protocol Adapter (IPAD) and Durand Communication's Mindwire multimedia platform."

eSoft, Inc. recently took an undisclosed equity position in Durand Communications Network, Inc. Becker will also serve as a member of the Board of Directors of Durand Communications.

This new strategy reportedly provides the ability to "build online information services of all sizes with any combination of stand-alone dial-up access, Internet access, or networked multimedia access to databases of all types (Oracle, Foxbase, Sybase, Microsoft Access, etc.) in a corporate LAN setting," noted Becker.

"At ONE BBSCON we will also be announcing several industry joint ventures which eSoft is at the center of that will provide the power to set the new standards required to move this industry forward.

"Mindwire has the same philosophy as TBBS in allowing custom system construction, but it adds full client/server and multimedia capability. In addition, it has been designed from the start to be fully Internet aware, and thus integrates World Wide Web type hyperlinks into a true online information service.

"The IPAD provides the last piece of the networked online puzzle by making the connection to the Internet for a currently non-connected site a breeze. The IPAD takes that nasty bunch of tasks that must be done to establish an Internet presence (router, terminal server, DNS, etc.) and puts them in a single box with a simplicity of installation and use never before seen. So now a site does not require extreme technical expertise to either build a sophisticated information system, or to connect it to the Internet."

Jim Thompson is
Managing Editor of
Western News Service
in Los Angeles,
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manages the Marlboro
Racing News BBS.
CompuServe:
72777,2677, MCI Mail://
321-4127, e-mail://
jim.thompson
@wnsnews.com

According to Becker, eSoft will also sell fully configured Web Servers, along with the IPAD and Mind Wire Servers. Also being previewed at the show is a set of Internet training aids from eSoft.

TBBS
eSoft, Inc.
15200 E. Girard Avenue
Suite 3000
Aurora, CO 80014
Tel: (303)699-6565
e-mail://sales@esoft.com
http://www.esoft.com

### **GALACTICOMM, INC. (BOOTH 501)**

Scott Brinker, President and CEO of Galacticomm says they have been "burning the midnight oil" for several months in preparation of the unveiling of three "major" releases at ONE BBSCON.

The first item is release 1.01 of Worldgroup and the Worldgroup client/server Developer's Kit. Version 1.01 of Worldgroup is a maintenance release that reportedly addresses "a few minor requests."

The client/server Developer's Kit allows "sysops and developers to write client/server apps for Worldgroup using Visual Basic and Borland C++." The open architecture of Worldgroup is by far its strongest attraction. According to a company spokesperson, "Everything from graphical databases to real-time shopping malls to multi-player games will be available, and nearly a dozen independent software vendors will be exhibiting their Worldgroup wares at the show."

Galacticomm will also be showing Worldgroup for UNIX, which runs the Worldgroup platform on Linux, OSF/1, SCO, Solaris and BSD servers. Worldgroup for UNIX allows administrators to launch applications, such as Oracle databases, directly within Worldgroup sessions, as well as to provide direct PPP "shell accounts" for users. "Code-named Project Unity, this release merges the company's internal DOS, Windows, and UNIX development environments, enabling parallel code development among its engineering team, dramatically reducing port time between platforms, and setting the stage for a Worldgroup NT Server release in the future," adds Brinker.

Also being unveiled at ONE BBSCON is the Internet Connectivity Option 2.0 for Worldgroup. This is described as a "plug-in connectivity option" that "turns a Worldgroup server into a value-added Internet Service Provider server." It reportedly allows "pass-through and proxy SLIP/CSLIP/PPP accounts to be provided to users through Worldgroup." Additionally, the Worldgroup client can run in parallel with Web browsers such as Netscape.

Also included is SMTP/NNTP realtime e-mail and newsgroup messaging, a Web-server with forms, image maps, user authentication, an integrated IRC client, rlogin client and server, ftp client and server (both anonymous and secure), finger client and server, telnet client and server, and additional capabilities. This option reportedly also supports Worldgroup client/server sessions over the Internet, "providing users with a truly interactive and session-based graphical environment over the Internet."

Additionally, Galacticomm will be demonstrating support for ISDN access via its intelligent Serial Kit, which they claim is capable of pumping the equivalent of "over 3 T-1's worth of solid data." Other products include real-time newsfeeds, an online TV listing and search product, and several document and database applications.

Worldgroup and Worldgroup Manager Galacticomm 4101 SW 47th Avenue Suite 101 Fort Lauderdale, FL 33314 Tel: (305)583-5990 BBS: (305)583-7808 e-mail://sales@gcomm.com http://www.gcomm.com

## MMB TEAMate (BOOTHS 815, 817)

MMB Development Corp. has carved a unique niche in the online world for their products. Their TEAMate line of UNIX BBS and Internet Server products is available for DEC Alpha, IBM RS/6000, Sun, HP, SCO and UNIXWARE. All of their products are "customizable using a tool kit," allowing the "look, feel and functions of the product to be tailored for specific applications." Additionally, integrated full text indexing of all data is supported. TEAMate GUI software is available for Windows, 3.1, Mac and OS/2.

MMB Development Corp. will unveil Release 4.0 of their MMB TEAMate Software at ONE BBSCON. The new version offers a host of new features.

Their client program is also getting a face lift. Chief among the new features is an integratged WEB browser which supports "all graphic types." According to Bob Baskerville of MMB Development

Corp, "When connected to a TEAMate server (via dialup ASYNC without TCP/IP) the new GUI client permits accessing HTML data on the TEAMate server or going outside the server to other WEB sites." This means that the browser operates over a regular async modem connection without TCP/IP and an Internet connection is not needed for callers to receive HTML data.

The new client program will also offer integrated FTP ability. "Users connected via dialup ASYNC can access any FTP site and do file transfers directly. The major advantage is that there is no intermediate step for the transfer. The file is moved directly to the user's local directory," notes Baskerville.

MMB will also be unveiling a Web Server Module and a CD-ROM Authoring Module for the TEAMate BBS. The Web Server Module allows the sysop to run a Web site without the need for a separate WWW server. The CD-ROM Authoring Module permits a sysop to "unload all or a portion of his BBS in a CD-ROM format for distribution allowing for the publishing of information in the CD-ROM format.

## TEAMate MMB Development Corporation

904 Manhattan Avenue Manhattan Beach, CA 90266

Tel: (800) 832-6022 or (310) 318-1322 Fax: (310) 318-2162

email://bob@teamate.mmb.com

http://www.mmb.com

## MUSTANG SOFTWARE INC. (BOOTHS 614, 615, 623, 722)

Mustang Software will debut several new products at ONE BBSCON. First on the list is their new 32-bit client/server BBS program for Windows 95 or Windows NT, code named "Annihilator." The project "follows the true client/server model and can be operated on either a single PC or as part of a network," said Rick Herning, Vice President of Mustang Software, Inc. Rick also tells me that a limited number of special pre-release CDs that tell the Annihilator story will be available at the show.

QmodemPro for Windows 95 will also be unveiled. It is described as "the only telecommunications program expected to be on the shelf when Windows 95 is released." It reportedly features OLE 2.0 support for drag-and-drop, allowing phonebook entries to be placed right on the desktop for fast, easy uploads. "It also has full MAPI links for transferring text, images and files to mail appli-

cations including Exchange, Microsoft Mail and cc:Mail. For BBS callers it continues to offer a file viewer that now adds JPEG to GIF and BMP formats, and has a full telnet client built in," notes Heming. It will be available at the show for the bargain price of \$49.

Mustang is hosting a free get-together and party for Friday night. Stop by their main booth (Booth 615) for a free invitation. Wear your best pair of white socks and dust off your formal pocket protector!

WildCat! and Qmodem Pro for Win 95 Mustang Software, Inc. 6200 Lake Ming Road Bakersfield, CA 93306 Tel: (805)873-2500 Fax: (805)873-2599 BBS: (805)873-2400

e-mail://sales@mustang.com http://www.mustang.com

## POWERBBS (BOOTH 633)

PowerBBS Computing will be demonstrating their Windows-based PowerBBS at the show. The package supports ANSI, ASCII, RIP and their own PowerAccess protocol which allows for the transmission and display of graphics and sound. Full Internet connectivity, including support for Internet mail, newsgroups and Telnet/FTP is available.

PowerBBS is fully compatible with dBASE III, dBASE IV, Clipper, FoxBASE, FoxPro, dBXL, Alpha and compatible xBASE DBMS products. There is support for indexing, and downloading of files directly from a database and memo fields. You can even attach a graphic image to database records for display or download.

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Additionally, there is internal ZIP/UNZIP support, support for Doors, caller-ID, send/receive FAX support and call back verification.

One of the most useful features of PowerBBS is the ability to preview graphics. More than 30 graphic formats (JPG, CMP, BMP, TIF, TGA, GIF, etc.) are supported. The preview "is a 24-bit color image approximately 200x200 and takes about 7 to 12 seconds to transmit." According to Russell Frey of PowerBBS Computing, "this feature has become so popular it is often over-used by callers. Because of this, we are adding a feature to limit the number of previews."

PowerBBS Computing will also preview their new 32-bit platform which will run under Windows-NT and Windows 95. "By doing this, we have been able to take advantage of the new 32-bit communications routines, threads, etc. We have also rewritten our configuration program from scratch making it an allin-one sysop utility for doing everything from packing the user base to adding a new CD-ROM to maintaining the file databases," notes Frey.

The new 32-bit version will reportedly ship at the end of 1995 or the first quarter of 1996.

PowerGenerator, the multi-media screen designer for PowerBBS will be demonstrated as well. This program allows sysops to convert existing PowerBBS menus to customizable 3-D screens for use in PowerAccess that feature 24-bit color images. According to the company, over 15 different graphic formats are supported along with full support for WAV and MIDI sound files.

Also planned for the show are lots of new third-party add-on products. Programming can be done in Delphi, C, C++ or any language that can program DLLs.

**PowerBBS** PowerBBS Computing, Inc. 35 Fox Court Hicksville, NY 11801 Tel: (516) 938-0506 BBS: (516) 822-7396 Compuserve: Go PBBS ftp://powerbbs.ic.net

## SEARCHLIGHT (BOOTHS 635, 734)

Searchlight will be demonstrating a "new line of World Wide Web host products that integrates traditional BBS features into a native Web environment." Frank La Rosa of Searchlight says this will be an entirely new kind of product that adds much of the functionality and features of the BBS to a World Wide Web host.

The new product (which has not yet been named) "will consist of a Web server and a suite of host modules. The core set of modules will be designed to perform the features commonly associated with a traditional BBS system," notes La Rosa. The program will reportedly include local message conferences, user demographics and security, and "verbose file libraries." In the future, modules such as database engines, news and advertising systems are planned. Although Searchlight will sell and support a Web host, the modules will be compatible with other Web hosts (for example, O'Reilly & Associates' Website software).

"Searchlight will provide Internet and Web host products for everyone, not just BBS sysops. But our product will also be compatible with Searchlight BBS software. For example, an operator can share message conferences, file directories and other databases between a traditional dial-up Searchlight BBS system and a Searchlight Web host system. Our new product will integrate Web technology and BBS technology in a way that has never before been available," said La Rosa.

Although the product is not yet available, a full working version will be demonstrated at ONE BBSCON. La Rosa is hoping to have the product ready for release in December, 1995. The initial product will run on Windows NT, but they expect to port the product to other platforms in the future.

Searchlight will also be showcasing the latest additions and improvements to Searchlight 4.5. La Rosa wants it clearly understood that their Web host products will not replace their current software. Both will be offered and supported in the future. Searchlight 4.5 supports RIP 2.0 and offers "full color bitmapped images and sounds on a nonproprietary terminal." La Rosa adds that they will not be offering a proprietary client program. In his words, "we are committed to RIPterm for the life of our dial-up BBS software."

SEARCHLIGHT Searchlight Software 6516 Detroit Avenue Cleveland, Ohio 44102 Tel: (800)988-5483 or (216)631-9290 BBS: (216)631-9285 ◆

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## CYBERWORLD MONITOR POSTAL SERVICE PROPOSES "CLIPPER JR."

By Frank X. Sowa

Does the U.S. Postal Service want to resurrect the intelligence community's dreams for the Clipper Chip? In June, the USPS unveiled an electronic postage stamp that could be considered the Clipper Chip's "little brother": an electronic postmark which will seal computer messages on any network by algorithmic encryption. It will automatically embed a string of codes into every message, and then encrypt the entire message for transmission. Only key-holders at each end will be able

to decrypt the message, and the string of codes will ensure the message's authenticity.

The USPS plans to provide the keys for the receiving and transmitting ends in a "postagemeter" type of approach. In their vision of online "security," the only safe path for any kind of mail passes through the U.S. Postal Service.

The Clipper Chip, you may remember, was a proposed encryption chip that the National Security Agency and the FBI wanted installed in every phone, computer, TV and appliance in America, so that everyone's communications would be made "secure." But these agencies also wanted the chip to enable government investigators to intercept and read those communications.

They cited the need to help "law enforcement agencies thwart criminals and terrorists who might use advanced communications to commit crimes."

Proponents called the Clipper Chip the "best means to ensure privacy and maintain secure transactions in cyberspace." Opponents called the Clipper Chip the beginning of a national security state where "Big Brother" could log the time, origin, and recipient of every call and e-mail message, intercept private email conversations, track our whereabouts and monitor all cyberspace financial transactions involving Americans anywhere in the world.

The administration backed down from mandating universal installation of the Clipper Chip. A number of companies have implemented the Clipper Chip despite consumers' concerns about its potential abuse by overzealous federal agents. Opponents continue to monitor its acceptance and use.



## **POST OFFICE CLAIMS OUR TRUST**

According to Postmaster General Marvin Runyon, "Electronic mail needs to be secure, and only the government is capable of instilling the trust needed. That adds an important new element to electronic communications. It guarantees the security of those messages and it makes it a federal offense to tamper with them."

Frank X. Sowa is president of The Xavier Group, an international consultancy that has been providing strategic planning, forecasting, training, and development of business and communications systems for organizations since 1981. As a professional futurist and speaker, he is often hired by corporations to monitor and provide advisories of upcoming trends that may impact their operations. As a certified software consultant for Softarc's First Class. and a reseller for other companies, he configures customized BBS systems for organizations, complete with "regular content updates." Sowa is also founder and syson of SEED.NET (412) 487-5449, "the online incubator" for small businesses, a seamless BBS-to-Internet (PPP) provider, with business start-up assistance and seed capital available online. Send e-mail to:

franksowa

@seed.net.com

Making mail-tampering a "federal offense" does not guarantee its security; it simply provides penalties for those who are caught tampering with the mail after the fact. Runyon also said that business mail has been dropping off because more businesses are using faxes and e-mail rather than the traditional mail services. Why would businesses abandon a trustworthy and timely delivery service if it was working so well?

Ominously, the USPS proposal was unveiled using many of the same arguments that promoted the Clipper Chip. The USPS said the postmark would be used as "a means to give legal protection against fraud, and help thwart cyberspace criminals."

While the Clipper Chip continues to hold the attention of people who see it as "the end of First Amendment rights in Cyberspace," the electronic postmark may give the government more access to private e-mail than the Clipper Chip. The USPS proposal does not seem to offer any controls over who can access encrypted e-mail. It seems possible that government investigators would have more-or-less free rein to do as they please with information they peruse during transit. This should cause some concern. I certainly see it as a potential government threat to our privacy. It is likely that moves to implement the postmark in a practically universal manner will be in place by year's end, without much public outcry.

## INVOKING THE "HAVES/HAVE-NOTS" AND OTHER FABLES

Robert Reisner, USPS VP of Technology Applications, speaking at the June meeting of the Smart Valley Project, declared, "In order for a communication medium to be trusted, there have to be some common standards and official controls. . . Now, as we engage in new electronic media, we need to reinstill such approaches.

"If you develop two worlds of information — a society of information haves and have-nots — the country will suffer with the divisions and cynicisms that such a world would breed," continued Reisner. "That puts an extra burden on institutions like the Postal Service to be a universal provider, keeping people connected to their government."

Reisner portrayed the USPS as the salvation of a chaotic Internet, saying, "As we see it, the electronic postmark is the first step in transforming these incredible and unrestrained electronic networks

into official pathways of communications. No longer will users have to worry about the security of their messages."

## GRASPING FOR ANOTHER MONOPOLY

The USPS is leaning hard on some of its major suppliers to support its bid for a monopoly on e-email security. Reisner

announced that the Postal Service has been negotiating with software companies like Digital Equipment Corporation, IBM, and Pitney Bowes,

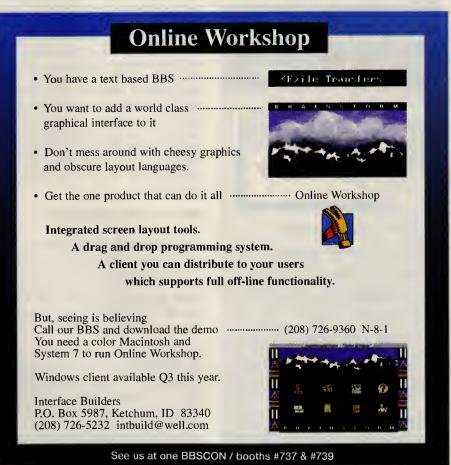
and with computer networks like America Online, trying to persuade them to offer the "official" USPS electronic postmark service in lieu of private sector encryption services. The USPS is also lobbying for legislation that would mandate use of its electronic postmark algorithms in most commercially available communication software. The postmark algorithms would be automatically engaged whenever a network was opened.

The Postal Service believes that such an all-encompassing fiat is important to consumers and their comfort about online security. Reisner, again waxing hyperbolic, said, "This approach would help certify e-mail and protect the privacy of customers, thwarting would-be criminals and terrorists, and securing one company's market-sensitive information against prying eyes of competitors, both

domestically and internationally..."

You have to admire a spin-master who can throw so many current political hot-buttons into a single sentence. But you don't have to

believe it. Everyone who's been paying attention knows that Internet e-mail is completely unsecured. "Criminals and terrorists" who conspired on the Net would be too stupid to cause much, if any, damage before being caught. Any employee who sends unencrypted "market-sensitive information" across the Net deserves to be fired for gross incompetence. The currently emerging system of privately developed encryption does not permit anyone — includ-



"The electronic postmark

may give the government

more access to private e-

mail than the

Clipper Chip"

ing the government — to poke his/her nose into two private parties' business. Why would we need a third player like the USPS?

According to Postmaster General Marvin Runyon, the new electronic postmark's development would be paid for primarily from postal rate increases. He said the first of these increases has been request-

ed for implementation in January, 1996. He said the post office aims to take a number of steps to enhance its services and move onto the information superhighway "in a big way."

"the new electronic postmark's development would be paid for primarily from postal rate increases."

In a speech before the Economic Club of Detroit on March 27, Runyon said, "The information superhighway is coming and we (at the USPS) are going to be on it with our own online service designed to service the 35 million information have-nots: providing access, protecting privacy, and helping serve your 21st-century communications needs." The

"have-nots" is unknown — as is his native planet, to which the "information superhighway" is still "coming."

The Postal Service, according to Runyon, would ensure that access to the information superhighway isn't confined to an "elite" group of Americans. He said 20 percent of households in America may be communicating electronically by

the end of the decade, and "That still leaves 80 percent that will have no means available to make use of the information age."

Runyon pulled

another fast one with that statement. It is illogical and misleading to equate non-use with deprivation. We all own or could afford plenty of things which we simply don't want to use. A person who does not "communicate electronically" may very well have all the "means available to make use of the information age" but simply choose not to use them. It is nigh impossible to buy a computer without a modem these days, but many modems lie idle simply because their owners prefer television.

In attempting to demonstrate how the Postal Service will provide the have-nots with an access comparable to the "haves," Runyon said, "We will do that through computerized kiosks for our lobbies that will let citizens get online and interact with government, quickly and conveniently." Can you imagine waiting for some 10 wpm typist to finish giving Bill Clinton a piece of his mind? The "havenots" will get "on line," all right — and stay there.

### WHAT IS THE USPS UP TO?

The USPS and its colleagues in law enforcement have no interest whatsoever in preserving citizens' privacy rights. Law enforcement just wants to keep track of what we are doing for whatever reason. The USPS wants to protect its future as a public monopoly.

By enlisting law enforcement's support, the USPS hopes to gain more allies in Congress, so it can propose and create the world's largest public or private electronic mail service. (Watch out, Bill Gates!) By siphoning tax dollars into its coffers in the name of "electronic national security," it hopes to sidestep Congress' harsh budget ax this year. Then, by mak-

ing the Post Office a vital element of "national security," Runyon, et. al., hope to stave off attempts to privatize the postal service. Representatives Richard Armey, R-TX – House Majority Committee Chair – and John Kasich, R-OH – House Budget Committee Chair – have promised legislation during the current Congress to privatize the Postal Service and end its monopoly.

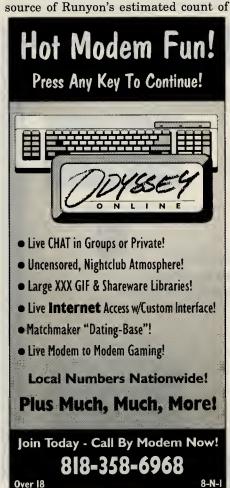
We, the people, shouldn't allow these groups to hide behind the Cold War's shield of "national security." Besides, this specific issue isn't really a national security issue – even when spinmasters work to make it sound like one.

We should also expose and repudiate the new sales-pitch the government is using to catch the ears of the politically-correct: the notion that those of us who have mastered online communications are an undeserving "elite" who should be taxed to pay for information access that the so-called "have-nots" don't want — at least not badly enough to earn it.

While information often improves lifestyles, it does not, as the administration implies, equate directly to monetary wealth. But, from government comments widely published, it is evident that the administration wants the majority of voters to believe this is so. They have made you the primary target of tax proposals designed to pay for rectifying the "crisis" they are purposefully creating: a divided society of "information haves and have-nots."

Furthermore, you have also become the primary target of those who believe that the online community is an unrestricted cesspool of filth and crime, and that the "haves" also need to be tapped to clean up and place proper controls on cyberspace.

It is time, now that you have been targeted as part of "the elite," that you use some of your newfound clout to get on the backs of those in government, and "educate" them on exactly what the online world is all about. If you don't soon, you can expect all kinds of ridiculous laws that inhibit your abilities to survive to be passed over the next few years. •



## U.S. POSTAL SERVICE KEY PERSONNEL AND CONGRESSIONAL OVERSEERS

## U. S. POSTAL SERVICE KEY PERSONNEL AND CONGRESSIONAL OVERSEERS

### **UNITED STATES POSTAL SERVICE**

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Chairman of the Board

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Sam Winters	(202) 268-2000
Postmaster General Marvin T. Runyon	(202) 268-2500
Deputy Postmaster General Michael Coughlin	(202) 268-2525
Communications/Media Robert Hoobing	(202) 268-2168
Freedom of Information Inquiries Betty Sheriff	(202) 268-2924
Vice President Technology Applicatio Robert A.F. Reisner	
Vice President Information Systems Richard D. Weirich	(202) 268-2523

## HOUSE OF REPRESENTATIVES

### HOUSE APPROPRIATIONS COMMITTEE

Subcommittee on the Treasury, Justice Dept., FCC, Postal Service and General Government House Rm. 164, Capitol Bldg., Washington DC 20515 Phone: (202) 225-5834

Phone: (202) 225-5834 FAX: (202) 426-3763

Appropriates funds for U.S. Postal Service and other agencies.

## HOUSE GOVERNMENT OPERATIONS COMMITTEE

Subcommittee on Information, Justice, Transportation and Agriculture  $\,$ 

B349C Rayburn House Office Building

Washington DC 20515 Phone: **(202) 225-3741** FAX: **(202) 225-2445** 

Oversight committee, makes sure appropriations are spent per the budget allotment in the best public interest

## HOUSE POST OFFICE AND CIVIL SERVICE COMMITTEE

309 Cannon House Office Building

Washington DC 20515 Phone: **(202) 225-4054** 

Jurisdiction over Postal Service legislation once it leaves the subcommittees above.

### SPEAKER OF THE HOUSE

Newt Gingrich R-GA

Rm. 2428 Rayburn House Office Building

Washington, DC 20515 Phone: (202) 225-4501

e-mail://georgia6@hr.house.gov

Allows postal legislation to come to the floor of the House for a vote.

## **HOUSE MAJORITY LEADER**

Richard Armey R-TX

Rm. 301 Cannon House Office Building

Washington DC 20515 Phone: **(202) 225-7772** 

Works to get the backing of the majority of his party on all votes for postal legislation. Has promised legislation to privatize the Postal Service will be taken up during the current Congress.

## HOUSE BUDGET COMMITTEE CHAIRMAN

John Kasich R-OH

1131 Longworth House Office Building

Washington DC 20515 Phone: **(202) 225-5355** 

Heads the Budget Committee which proposes the House version of the Federal Budget for vote on the floor. Kasich opposes growth of the postal service and has promised legislation to privatize the Postal Service.

## SENATE:

### SENATE APPROPRIATIONS COMMITTEE

Subcommittee on Treasury, FBI, ATF, Postal Service and General Government Rm. 190 Dirksen Bldg.

Washington DC 20515 Phone: **(202) 224-6590** 

Jurisdiction over legislation to appropriate funds for the post office.

## SENATE GOVERNMENTAL AFFAIRS COMMITTEE

Subcommittee on Investigation Rm. 100 Hart Bldg.

Washington DC 20515 Phone: **(202) 224-3721** 

Oversight subcommittee to make sure appropriations are properly spent.

## SENATE GOVERNMENTAL AFFAIRS COMMITTEE

Subcommittee on Federal Services, Post Office and Civil Service

Rm. 601 Hart Bldg. Washington DC 20515 Phone: **(202) 224-2254** 

Jurisdiction over postal service legislation

by David Hakala

Terminal emulation programs commonly used to log on to BBSs grew up in a highly competitive, rapidly evolving environment. When BBSs added new graphical and audio capabilities, file-transfer protocols, QWK-mail, etc., terminal program developers scrambled to keep their products "capable of everything." Simultaneously, each terminal program vendor had to have at least as many terminal emulation types, file-transfer protocols and task-automation features as any of the other terminal program vendors. The dual-track rat race led to high levels of sophistication that users have come to expect.

By contrast, the Internet has been a pretty plain, ASCII-text environment for most of its history. The **TELNET** protocol developed for remote log-on to Internet hosts is a one-trick pony, and a lame one at that. For example, virtually all telnet programs choke on IBM graphic characters and ANSI color/screen-control sequences that any decent terminal program easily handles. If you are not directly connected to the Internet by a SLIP/PPP or dedicated IP link, downloading a file is an awkward two-step process. Even if you do have a direct link, you must switch from telnet to an ftp program. Some recent telnet programs have added Xmodem, Zmodem and other file transfer protocols, but few we've seen work as well as they do in terminal programs.

The barebones presentations of ftp sites, gophers and UNIX shell accounts have left a huge demand for BBS-like amenities on the Internet: useful file descriptions, search capabilities, and so on. Many BBS sysops have rushed to fill this need by putting their BBSs directly on the Internet and allowing users to log on using the telnet protocol. Unfortunately, the available telnet programs are "stupid as a box of rocks," as Jack Rickard cogently put it. You can connect to a BBS via telnet, but the experience is usually slower, jerkier and more error-prone than a direct-dial connection. However, telnetting is much cheaper over long distances than MCI or AT&T, so users keep searching for a telnet program that works "just like a terminal program."

The World Wide Web has amplified users' howls for such a "smart" telnet program. Web browsers such as Netscape allow "helper" applications to be hooked to them, so you can telnet to a site when you click on a telnet link in Netscape. But the transition from Netscape to most telnet clients is a bit like going from asphalt to gravel road at 65 mph.

What we really want is a top-of-the-line terminal program that can also do telnet, and it must be usable as a helper application by Netscape or any other browser. It's the Holy Grail of communication software. We came pretty close to nirvana in our July 1995 issue, with Procomm Plus for Windows v2.1 and a cunning ASPECT script written by John A. Meier of Datastorm Technologies at our humble suggestion (begging, really). We could plug Procomm Plus for Windows into Netscape as a helper application, enter telnet://board watch.com or any other telnettable URL, and Netscape just vanished as Procomm Plus for Windows took over. Logged on to a telnettable BBS, we could transfer files, capture screen logs, switch to RIPscrip, view GIF images as they downloaded and enjoy all the other luxuries we so richly deserve. Just one minor limitation in the script language kept the whole process from being totally seamless: a dialog box must be manually cancelled as control is passed from Netscape to Procomm Plus for Windows. We're spoiled; we want that extra keystroke to go away.

### **QMODEM PRO FOR WINDOWS 95 TO THE RESCUE**

Mustang Software Inc. has made *all* the telnet difficulties cited above go away, almost as a side effect of its new, native 32-bit *Qmodem Pro for Windows 95*. (Don't try it with Windows 3.x; NT or Workgroups *may* work but are presently unsupported.) Qmodem Pro for Windows 95 is touted as "the only (Windows 95) telecommunications program expected to be on the shelf when Windows 95 is released" in August, and we haven't heard any rumors to the contrary. It has a host of unprecedented creature comforts; see Jim Thompson's "Technology Front" in this issue for a preview of them. We'd love it even if it didn't do telnet; but it does, well enough to satisfy even our lazy bones.



Figure 1

Assuming you have a working Winsock installed, configuring a Qmodem Pro for Windows 95 dialing directory for a telnet connection is as simple as setting one up for direct-dial. Just enter the telnet address of your target in lieu of a phone number, as Figure 1 shows. No, we didn't skip any steps. You're ready to "dial" this entry and make a telnet connection.

OLE 2.0 makes life even easier; you don't have to open Qmodem, click on the dialing directory button or search for that entry you call every other minute. Just drag the entry's icon over to your Windows 95 desktop and plunk it down anywhere. A double-click on the icon launches Qmodem and a telnet session.

Qmodem Pro for Windows 95 just as easily installs as a telnet helper application in Web browsers. Figure 2 shows the relevant part of Netscape's Supporting (helper) Application configuration screen. Just enter the pathname and QMWIN.EXE, add a space and the TELNET switch, and you're ready to roll.

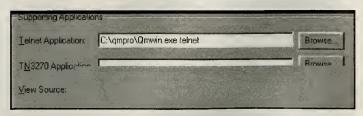


Figure 2

### SO NOW WHAT DO WE "NEED"?

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Yourself, Write Comment into Audit User Defined Information, Announce play DOS Directory, Toggle Trail, Change Password, Post Credits, Command, Userlist at Logon Toggle, Reprompting, Alternate /GO Internet Address Cross Reference, Sys-Busy Toggle, Set Nickname, Auxilary Command, Toggle Alternate tem Stats, Page Unbusy List, UltraGrams

Cheersoft - MultiChat How about this 4 user chat? Why can't I get a break? I gotta do everything mys I love it! Its so cool! I'm hungry. Frank Rizzo So did anyone try the new version of Globals yet? Bandit Watch out for that batl

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## DR. BOB by Bob Rankin

## **ISP TALK**

Chris Hawkinson realized a few years back that his community in New York State's Mid-Hudson Valley area would be needing Internet services soon. But when he brought up the idea of offering that service at a price less than cable TV, he got laughed out of

the room. Looks like Hawkinson got the last laugh, because today his *MHVNet* operation offers full Internet access starting at \$55 per year.

Ever since he was a teenager, Chris Hawkinson had a desire to run a place where people could share files. Undeterred by his parent's subtle going-to-college gift of a Sinclair ZX80, Hawkinson eventually started his first BBS in 1988.

And once bitten, there was no quenching his thirst for files, files, and more files. An NFS site on the Internet became his source for the latest and great-

est, but over time it became necessary to get a dedicated 14.4K SLIP connection to the Net.

PSI was more than happy to pocket \$350 per month to provide the feed, but this made it necessary for Hawkinson to start ask-

ing for donations to offset the cost of running the BBS.

A growing desire to move beyond being just a file repository led him to investigate the establishment of a Freenet, but he found little or no support for the idea in the area.

And when PSI made the crack about cable TV... "That did it. I knew I had found my next big challenge," says Hawkinson. And two years later in mid-1994, MHVNet opened its virtual doors by offering full Internet access for less than \$5.00 a month.

Today he has a dedicated T1 hardwired into cyberspace, 85 incoming lines, 3 Annex terminal servers, several Tantung (Sun clone) workstations running Solaris 2.4, a couple of Intels running OS/2, and oh yeah... about 2,200 paying customers, many of whom opt for SLIP/PPP service at about \$15 per month.

**BR**: Chris, let's get personal... What did you do before the Internet screwed up your life?

CH: I was a Senior Software Engineer at Macbeth, a division of Kollmorgen, for 8 years before I went into consulting. My consulting business is still very active and we do a great deal of "developing applications for resale" with traditional companies who don't have a development staff.

BR: What kind of startup problems did you encounter?

CH: There were very few problems, being used to a BBS. The big ones were getting used to the technology of the Internet and the business side of things. Being a successful developer and product development manager, I was used to doing business deals of \$25K-\$100K, but only selling to a selected few. Trying to sell a service to everyone was the biggest transition for me.

The second biggest problem is faced by many "for pay" bbs sysops - how can you accept credit cards? That one took a good deal of work.

BR: How did you find the money to get started?

"The trick is don't think

small. Starting too

small will kill you."

CH: MHVNet needed over \$125K in hardware/soft-

ware development and startup costs. Some of this came from me, but the vast majority of it came from the SBA (Small Business Administration) program. This was an experience. Trying to talk to people who had NO idea what the Internet was for, and trying to

explain how I was going to pay back the loan was a long and frustrating experience.

[Ironically, the SBA has its own, very well done Web site at http://www.sbaonline.sba.gov/ — Ed.]

All told, it took over 26 weeks from when I entered the paperwork at my first bank, to when I had the check. As with any business, the only reason anyone listened to me was due to a well thought out business plan.

BR: Can a small-time ISP make a living doing this?

CH: Depends on what you consider small-time. I don't consider MHVNet to be big (yet), so I'd say yes. The trick is don't think small. Starting too small will kill you.

BR: Any advice for wanna-be sysops?

CH: Don't ask me this, I could be here all day... OK, first general stuff. If you're going to be "for pay," you have to understand why people are going to go to your service. "Low cost" isn't the formula to success. Actually, I invert it: "high value" is what people want. This means a reasonable cost for a *great* service.

When considering your system, don't design yourself into a hole. The idea of running a small system and growing doesn't really work any longer. It's mathematics. Let's say you start with a PC connected to a

Bob Rankin, known as "Doctor Bob" in the online world, is a computer programmer and consultant who enjoys exploring the Internet and sharing the fruit of his experience with others. His free guide "Accessing The Internet By E-Mail' has circulated widely on the Internet, and is available in 15 languages. Rankin has also authored "100 Cool Things To Do On The Internet" and "Doctor Bob's Internet Business Guide" which are available for \$5.00 each. For info, send e-mail to bob rankin@mhv.net or via the web at http://csbh.mhv

net/~bobrankin

56Kbs line with eight modems. With eight lines, using a standard formula of users per line, you maximally see about 100 customers.

"High value is what people want. This means a reasonable cost for a great service."

Now, this is an overestimate since with only 8 lines, there are going to be busy signals. Further, with a 56Kbs line, only 4 people could be getting files down at a time at 14.4Kbs, without it dogging. At a monthly rate of let's say, \$20/month, this is \$2000/month. However, let's look at your costs....

Phone Lines (est. \$25/month/line)	\$400
Internet Connection	\$500
Local Loop Connection	\$250
Insurance	\$60
Electricity	\$40

About \$1250. Now you add startup fees, and the payback of a fairly decent CPU. Also, very few people have 100 customers the day they open their doors. Ooops, you wanted to MAKE money?

In reality, a 56Kbs line isn't enough anymore, except maybe for a low-end BBS. I use high-end equipment, like a dedicated terminal server and Sparc clones, so the system scales well. Each machine handles multiple CPUs, and they're not wasting their time doing SLIP/PPP connections, that's what the terminal servers are for.

If you aren't willing to go out and get the business, don't bother (starting an online service)."

Also, if you aren't willing to go out and "get the business," don't bother. Of all the reasons why I have seen one company succeed when two competitors are equal is that the company who goes out and meets people builds a strong relationship with the customer. A face is more important than a name.

Lastly, technical support is an important issue. Don't think you can do this and something else easily. People need help.

BR: Let's get into day-to-day operations. How much of your time does MHVNet require, and how many people do you have on staff?

CH: Depends, average 4-5 hours a day. Mostly working on business accounts, though. Most of the standard dial in accounts can be automated. Technical support is also an issue, however. We have three or four others on staff, depending on how you count.

**BR**: Any horror stories (hackers, crashes, etc.)?

CH: Nothing major. We have had our share of hacker attacks and only one big crash. During the first month I spent several nights working on the system trying to understand why it was doing this, when I expected that.

**BR**: Tell me about your all-time crankiest customer.

CH: My worst nightmare client was when we first started. In e-mail he was the rudest, most annoying person in the world. He couldn't read my messages, though he was able to reply to them and was convinced I was out to get him. At one point he called and then hung up between 2am-4am (I have kids), and then repeated this performance two days later. His beef: I somehow called up his computer (which was not on), and took back all the files he downloaded. How do you talk to someone like that? Didn't matter that all of his friends said it wasn't possible, I had to have been at fault.

**BR**: Let's talk about the future of MHVNet. What are your plans?

**CH**: I want to offer new and different services, expand into more communities, and develop gaming and specialty accounts.

You have to understand my business attitude. I'm not into controlling everything. MHVNet works with others to bring up POPs in locations I can't go into. If someone wants to bring up an Internet Service in some

area, we work with them to see what services we can provide and how we can help. We then share the business and customers. I have people even looking overseas on this.

**BR**: Are you worried about the big guys muscling you out?

"Many of my subscribers have left from the 'big name' services and came where the grass is greener."

CH: Nope. The "big guys" are my biggest advertisement. Many of my subscribers have left from the "big name" services and came where the grass is greener. There is so much room in this industry and so many niche markets, as long as you keep your eyes working, business will still be good.

**BR**: Let's do philosophy. How do you feel about the concept of building a local online community?

**CH**: Very much in favor of it. It's not easy, but that community is crucial.

**BR**: Are people interested in that, or do they think of MHVNet as simply a wire that connects them to the "stuff" out in cyberspace?

CH: Some each way. I've been trying to find more and better ways of doing this, but it's like creating a family tradition spontaneity is the key.

**BR**: Is the Internet secure? Does it matter?

CH: Hahaha, as secure as a sponge! Does it matter? Hmmmm... tough question. For selling services, yes. For using it, no. Depends on your view of "secure." Any time a wire goes from one place and passes through a number of places to get to the final destination, it is insecure. Like sending a love note through a series of friends; who knows who may be looking? Personally, it is secure enough — for others, maybe not. ◆

## MHVNet Vital Statistics

- ① Dialup services for Individual & Business
- BBS, UUCP, Shell, SLIP/PPP, ISDN
- Dedicated lines up to 128Kbs
- Web, Gopher, FTP, Mail Lists, Forwarding
- Custom Web design and Software Development
- BBS account with text-based Internet: \$55/year
- ① SLIP/PPP 60 hrs/month: \$180/year

- Untimed SLIP/PPP: \$300/year
- O No setup, no hourly fees
- O POPs: Poughkeepsie NY, Kingston NY (Soon: Fishkill NY, Westchester and Rockland Counties)
- Web: http://www.mhv.net
- ② E-mail: chris@mhv.net
- Dialup: (914)473-0191

## INTERNET SMTP/POP3 E-MAIL SERVER FOR WINDOWS NT

by David H. Klein

The most significant component of sending and receiving email depends on the *Simple Mail Transport Protocol*, SMTP, defined on the Internet by RFC 821. The best analogy of how it works uses our public postal system as a model. When a piece of mail makes it to the local post office, our mail carriers decide which office will get it to its final zip code. The office they decide to send it to will either be the destination post office or a post office which is one step closer in the hierarchy of the system. Once the mail is brought to the destination office, it is sorted to the appropriate carrier's box for its trip to you.

The role SMTP plays has to do with the delivery of the mail from one "post office" to another. SMTP takes two forms, one called the SMTP Client and the other the SMTP Server. When you send e-mail, your e-mail program passes your message to an SMTP Client program. The SMTP Client will read the host machine address on your e-mail and decide which SMTP Server to send it to. This can be any number of servers closer to the mail's destination.

The SMTP Client will call up an SMTP Server on the Internet, one step closer to the mail's destination. If the server can accept the mail, it will. Otherwise it will send an error message to the client. After accepting mail, the server distributes mail in one of two ways. For mail bound to another machine, it initiates a new SMTP Client and passes the mail to the new client. If the server determines that the mail has reached its destination (i. e., the host machine address on the mail and the machine that the SMTP Server resides upon are the same) it stores the mail in the mailbox of the recipient for later viewing or downloading. This process of client-server communication continues until either the mail reaches its destination or it is returned with an error.

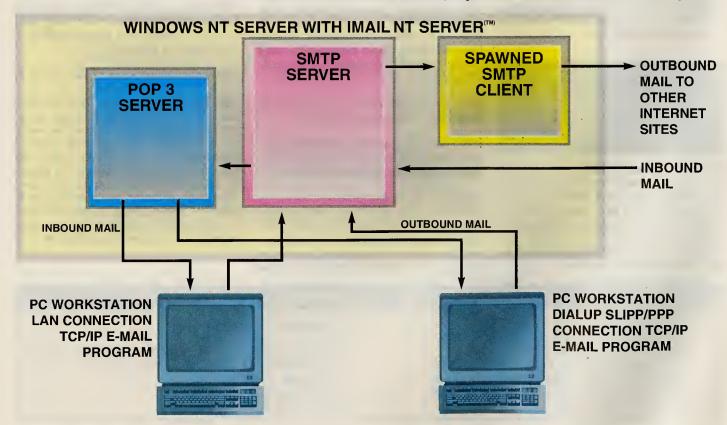
One of the requirements of the SMTP mail paradigm is that a destination host be available for receiving mail on a regular basis. Typically, SMTP server machines are left on 24 hours a day, 7 days a week. But if a client cannot connect to a destination server it will retry delivery for a period generally ranging from 1-3 days. Delivery will be retried at intervals determined by the person who operates the SMTP Server on that machine.

Another requirement is that the mail-receiving machine have a fixed IP address - that is, mail can only be delivered to sites which have direct connections to the Internet. In order to let people who are not directly connected to the Internet retrieve their mail, the SMTP Server stores it in a mailbox on the host machine at which a user has an account (user\_account @host\_machine). When users want to get their mail, they log into a special mail server on the host machine which allows people to log in and collect their mail. This part of the process is handled by the *Post Office Protocol 3* (POP3) Server as last defined in RFC 1725.

### **PICKING UP YOUR MAIL**

When you tell your e-mail program to get your mail, it will typically dial your modem to connect you to your ISP. Your e-mail program will then initiate a POP3 login to the POP3 Server. This login process must be via some type of TCP/IP connection, either SLIP or PPP. Then your account name and password will be transferred to the POP3 Server. If they match the server's database, it will download your e-mail.

While POP3 is mostly used for downloading mail via a modem, it can be used for transferring mail from one site connected on the Internet to another. In this case, the POP3 login would simply make a direct TCP/IP connection to the server. You might ask at this point, "If I can retrieve my mail from any point on the Internet, why do I need an SMTP server to collect my mail?"



You can log in to a POP3 Server to collect your mail from anywhere on the net at any time using any method, but you need an SMTP & POP3 Server on a host machine that is hard-wired to the Internet to receive and store your email. The Internet requires messages to reach a destination which is directly connected to the Internet. The SMTP & POP3 Server combination provides the central, fixed location that receives, stores, and delivers your e-mail. The POP3 Server delivers your mail to you from your mailbox when you ask for it.

We've been beta testing Ipswitch, Inc.'s *IMail(tm) Server for NT* suite of SMTP/POP3 services for the last two months. Released on June 19, the \$695 package sports everything you need to provide e-mail services for an unlimited number of users, including:

- **SMTPD32.exe**, an SMTP compliant e-mail server
- POP3D32.exe, a POP3 server
- FINGRD32.exe, a Finger server
- WHOISD32.exe, a Whois server
- pserve.exe, a password support server for Eudora
- LISTSRV.exe, a Mailing List server
- IMail.exe, an e-mail client application with 10 site licenses
- REGIST32.exe, the user manager and registration program
- IMUTIL.exe, a user utility for editing passwords, plan files, mail sorting rules, vacation files, and an e-mail forwarding address

#### **INSTALLATION**

Setting up the server is a simple process which requires a minimum amount of information. The first dialog box will ask you if you are installing for the first time or re-installing a new version. The re-installation feature allows you to keep all of your user information intact no matter what version of the software you are installing. After that, it will ask you for the Internet domain name of your computer and give you the preferred installation folder: C:\mall. When you click OK, the program installs the software and starts both the SMTP and POP3 servers.

If you want to check to see that they are running, you can open a control panel called IMail Services. From there you have the ability to edit and check the settings for all of the servers (SMTP, POP3, Whois, Finger, pserve), the fold-

er and path settings for the executables, and the mail queue.

#### SETTING UP E-MAIL ACCOUNTS

In order to set up e-mail accounts, I double clicked on the User Manager utility. From there I get a screen which has two windows, a user window and an alias window. Creating a new user is as simple as clicking on the "Add" button in the user window. It will then ask you for an account name. Unfortunately, it only allows 8-character names, but with a little trickery you can work your way around this limitation. The alias system allows a larger name with 45 charac-

ters. Just remember that an alias does not receive mail, it forwards to a specific account.

When creating the account names, choose carefully because you are limited to 8 characters. If you are adding many people you might want to use an initial/ numeric account (i. e., jjd0045). For the account name that I would give out to

other people, I would make an alias for this account with a reasonable name, john\_doe@your\_host.com. John Doe would log into his e-mail program under the account name, jjd0045.

#### **ALIAS SYSTEM FEATURES**

The alias system has two additional features. You can make an alias of multiple account names. These can be internal to the host, external to other Internet addresses, or a mixture of both. Last, if an application program can accept mail, you can make an alias which pipes the mail to it. This is the method which drives the list server.

Administration of the aliases is exclusively kept within the User Manager program, but there is an additional program, the IMail User Utility, which allows individuals to update their account information remotely. To use it, the individual logs into the POP3 server in the same manner they would within their e-mail account. It provides a simple GUI interface to all of the relevant files for maintaining their account. Once in the account, you can enable, disable, and edit the usage of the account, the password, plan file, vacation file, rules-based e-mail processing, and a forwarding address.

#### **RULES-BASED MAIL SORTING**

One of the more interesting features is the rules-based processing. This allows you to set up the program to sort your mail based on what is contained in some of the main headers. The server will sort your mail into the appropriate folder within your mailbox. The beta version of the program had a small problem with this. The only place that you could read the mail that was sorted is on the server machine. Upon logging into the server via a POP3 connection, the server only downloads what is in the Main folder in your mailbox to you. It leaves the sorted mail in the folders on the server.



#### CONCLUSION

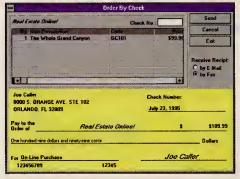
Overall, the IMail server for NT is a large comprehensive package which does the job of Internet E-Mail at a reasonable cost. The major features of the program work well. Some of the fancier ones which many UNIX people will expect require either a little bit of duct tape or attention from Ipswitch's programmers. I do expect this package to be a complete solution for any organization of over 5 people who expect to provide their own services on the Internet with Windows NT. I have also been told that we should expect many other server packages from Ipswitch. You can contact them for more information or purchasing at: Ipswitch, Inc., 81 Hartwell Ave., Lexington, MA 02173, (617)861-1411 voice or (617)861-8788 fax. ◆

David H. Klein works at Digital Consulting, Inc., (Andover, MA) as their Project Manager of Internet Relations. He has five years experience on the Internet and nine years with BBSs. He can be reached via e-mail://davidhk @dciexpo.com. DCI is running Internet Expo this November 28-30 in Boston amongst its many seminars and conferences. For more information, call (800)470-3880 or use the web, http://www.DCIexpo.com

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ALEX is your complete online text database solution. With ALEX, you can make available huge databases containing text, photos, or other objects. ALEX integrates Adobe Acrobat technology, enabling you to provide complex documents online in their original format. Create manuals, forms, spec sheets, real-estate sheets, and any other graphical document using your favorite authoring program. ALEX can display it exactly the way it was created! Users can search using full-text, proximity, boolean, and keyword searches.

\$479



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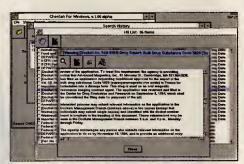
#### Cheetah

APDI's popular full-text searching software now runs on the Worldgroup platform. Users can access your full-text databases with the power and speed of Cheetah and the ease of use that comes with Windows and the Worldgroup Manager. Cheetah supports online image viewing; simultaneous, boolean, phrase and proximity searching; and multiple database searching (up to 64 at the same time). Users can save search results locally and print them out. Search histories are also generated for each user.



6805 Coolridge Dr. • 2nd Floor • Camp Springs, MD • 20748 Voice: (800) 785-APDI • Fax: (301) 449-1224 • BBS: (301) 449-1835 E-mail: cheetah@apdi.net \$1,995

See us at BBSCON Booth #520



## **Community Calendar**



Community Calendar is a dynamic P.I.M. application that helps to organize you AND your callers. Need to plan an event and want to make sure you don't forget to post it? Post it NOW and it will appear to your callers on the date you entered it for. Boasts an attractive Worldgroup client/ANSI/ASCII interface and some very popular features like logon news, MHS network support, unlimited calendars for special interest groups, personal calendars, boolean keyword searching and RSVPs.

\$249

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14126 Sherman Way • Suite 207 • Van Nuys, CA • 91405-5633 Phone: (800) 779-5646 • Fax: (818) 779-5646 BBS: (818) 779-5600 (bbs.annex.com) • E-mail: ggooden@annex.com

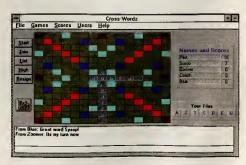
#### Cross-Wordz

The ultimate interactive word game. Players compete in a 15x15 grid to place words they create from a combination of tiles. You can have an unlimited number of games being played simultaneously and up to five players can play in each game. User scores are kept in a database to maintain the top ten list. You can add and remove words from the dictionary, allowing you to control the difficulty level.



\$23995

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### Major CD

Major CD works just like Windows Explorer/File Manager. Worldgroup Manager can be used without being connected. Total security and adult pseudo-keys guarantee system integrity. Add up to 255 CDs to your system, and up to 42 CDs on one computer. Special Pioneer Jukebox support. Works on any network. Custom ZIP comments are a great, FREE way to advertise. Full-screen ANSI tagger and full-screen RIP tagger. Multilingual support (no text hard coded). FREE powerful offline tag system for DOS, Windows and Atari ST.

#### Mountain Rose Multi Media

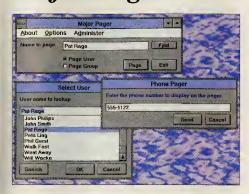
Kikkerveen 31 • 3205 XC Spijkenisse • The Netherlands Voice: +31/1880-33083 • U.S. Dealers: (800) 473-3177 or (307) 237-0065 Fax: +31/1880-41551 • BBS: +31/1880-40035 • E-mail: sysop@sterbbs.nl

## Call for prices

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### Major Pager



Major Pager allows you to integrate personal pagers into your Worldgroup system. Users can register their personal pager information confidentially. Ability to page a user's beeper with name only — no numbers to memorize. Supports text pagers, allowing short messages to be sent to a user. Groups of users can be paged at the same time. Major Pager can page a user when e-mail arrives, with text on text pagers! Online Sysop configurability. A must have addition to your Worldgroup system.

\$195

## Mardack & Associates

P.O. Box 2194 • Pinellas Park, FL • 34665-2194 Phone: (813) 573-3665 • Fax: (813) 573-3996 • BBS: (813) 572-0101

## Marketplace

Marketplace is a user-friendly, menu-driven classified advertising database. Advertisers can include a picture (GIF, JPG, TIFF, PCX, etc.) with each advertisement. Callers can be notified when logging on that new ads were posted in specified categories. Marketplace allows you to charge by the word or by the ad. Collect payments by credit card or by deducting credits and/or days from the user's account. Credit card charges can be instantly processed online when used with our POS Dial Module.



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#### **MEGA Market**



MEGA Market is a full-featured online shopping system that meets your collection and payment needs. Supports both ABS Checks Online and credit card payments. Import/export stores online or offline; fax invoices and purchase orders; and view product images online. Exports transactions to standard ASCII file for accounting. Handles subscriptions, online mail-order and recurring billing. Automatically assigns and applies bonuses. Changes user class on the fly. Supports product keyword searches and multiple taxes.

\$349

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Phone: (904) 729-3006 • Fax: (904) 729-2188 • BBS: (904) 729-3827

## Menu Magician



Change your existing menu pages or create new ones and link them directly into your current menus while your system is still on the air! An invaluable tool, especially if you manage your system remotely. Edit pages by clicking on a page in your menu tree, select module names from a pick list of all the modules currently running, and decide on an appropriate icon with the handy Icon Browser. You'll wonder how you ever lived without it.

150

See us at BBSCON Booth #601

## **High Velocity Software**

PO Box 34455 • Phoenix, AZ • 85067-3455 Voice: (800) 572-5582 • Fax: (602) 234-0730 • BBS: (602) 222-3000 E-mail: support@mail.hvs.com

#### Message Central allows your users to retrieve e-mail and forum messages automatically from your Worldgroup system without manually running e-mail and forums! Users configure the program to operate on a timed interval or on a preset schedule with up to 10 timed events per day, seven days a week. There is a client-based audit trail to track the program's activity and message counts. When new mail has been retrieved, users are notified by an icon and an audible

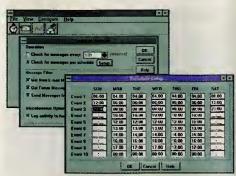


10030 Griffin Road • Ft. Lauderdale, FL • 33328 Voice: (305) 434-0189 • Fax: (305) 434-7116 • BBS: (305) 434-5619 E-mail: info@bsitech.com

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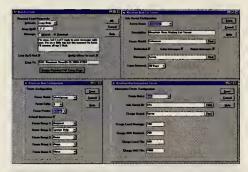
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# Message Central



#### Mountain Mail

message.



Let anybody retrieve information about your products. Support your customers worldwide. With the automatic e-mail responder, you can send "I'm away/back" messages. Keep your partner or colleagues informed with the automatic e-mail copy. Use e-mail to send fax messages. Let your users create their own cover pages. Full screen forum selector and quickscan configuration. The default quickscan is ideal for new users. ANSI-users can use the global address book. Forum colors, sorted forums, forum groups and more are also supported.

#### Call for prices

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#### Mountain Rose Multi Media

Kikkerveen 31 • 3205 XC Spijkenisse • The Netherlands Voice: +31/1880-33083 • U.S. Dealers: (800) 473-3177 or (307) 237-0065 Fax: +31/1880-41551 • BBS: +31/1880-40035 • E-mail: sysop@sterbbs.nl

## Multimedia Registry

Multimedia Registry is the ultimate user registry database! Supercharge your online service with sights, sounds, and online configurability. In addition to answering Sysop-defined questions, callers can include a picture (GIF, JPG, TIFF, PCX, etc.) of themselves along with a sound clip (WAV). The Worldgroup client includes integrated image viewing and sound playing along with contextsensitive help.



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#### Newsroom

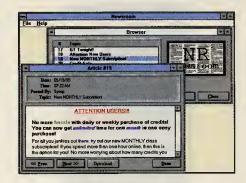
Write news articles, system announcements, and other messages for your users to receive the next time they log on. Attach each message to a specific key or class, allowing you to control who sees which messages. Sysops or appointed editors can create messages in ASCII/ANSI or client/server mode that contain colors or bold/italic text, expire after a certain number of days, have attached files, and much more.



## **High Velocity Software**

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#### Omni-Mall



Omni-Mall is a complete online shopping system allowing you to sell your products online and/or rent space to other merchants. Omni-Mall supports sales of products, services, and software files. Up to three pictures (GIF, JPG, TIFF, PCX, etc.) of each product can be included. Orders can be faxed to merchants when used with the Fax/Online module. Credit card orders can be instantly processed online when used with our POS Dial Module.

\$499

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## Professional Backgammon

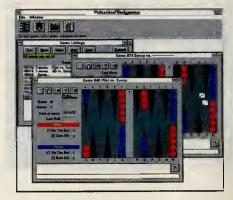
One of the most popular interactive games for Worldgroup. Everyone knows how to play Backgammon and we've made it even easier with all the click-and-drag features. This Backgammon game even uses the Double Dice for challenges. Players can participate in up to 10 games simultaneously with an unlimited number of spectators watching. You can configure the maximum number of days a game can be played and the number of days before deleting an old game.



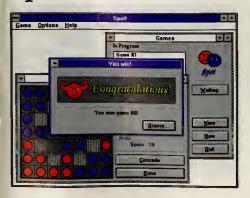
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\$159<sup>95</sup>

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## Spot



"Divide and conquer" takes on a new meaning in the client/server version of this board game. Players start on variable sized grids with random obstacles thrown about for added complexity. They can jump one of their pieces to an opening two squares away, or break a piece into two pieces to fill an adjoining space. All pieces neighboring the new piece are turned to your color. Other players can watch games in progress, or check out the high score list.

\$60

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#### **TeleTalk**



TeleTalk is a personal conferencing tool that opens a new and exciting dimension for users of the Internet, Novell networks, and Worldgroup. With TeleTalk you can speak: with your own voice, with other users of TeleTalk all over the globe via Internet, around your office via LAN or WAN, or via modem. TeleTalk also provides a distribution of your picture to accompany your voice. Users actually see your picture while they are listening to you talk!

\$150 Server w

Booth #803 & 805

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CINECOM

15621 Neath Drive • Woodbridge, VA • 22913
Phone: (703) 680-4733 • Fax: (703) 680-1697 • BBS: (703) 730-1420
WWW: http://cvinet.com • E-mail: info@cvinet.com

Chess players have enjoyed this game for years. This game offers every feature of Chess including castling, empassant and more. This chess game uses the National Chess Federation rating in points starting everyone at 1000. Players can choose from a 2-D or 3-D chess board and can chat with each other during game play. You can configure the maximum number of days a game can be played and the number of days before deleting an old game.

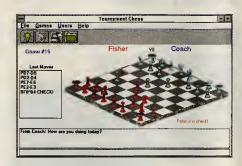


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\$15995

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#### Tournament Chess



## Video Blackjack



Play head on against the house computer. Select your type of bet and play the real 21 Blackjack. Features double down, split and dealer stays on 17 and above. You can configure the minimum and maximum bets and whether your users play with real credits or pseudo-credits. Each card was individually scanned, for a beautifully rendered and realistic representation of a traditional playing card deck.

\$9995

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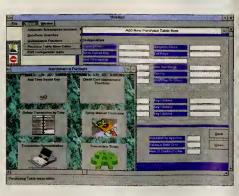
#### VisaMan

VisaMan is the premier credit card billing module that allows your users to gain instant access to your BBS with the most convenience. The menu of services is tailored to each class of user on the BBS, giving the Sysop virtually unlimited configurability. VisaMan can optionally post credits to the user, switch his class, and give him expireable keys. Credit card orders can be instantly processed online when used with our POS Dial Module.



\$199

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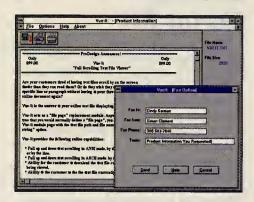


3301 Juan Tabo NE • Suite 113 • Albuquerque, NM • 87111 Voice: (800) 870-0004 • Fax: (505) 294-8225 • BBS: (505) 294-1575 E-mail: sysop@dump.com Vue-It brings full-screen scrolling text displays to your Worldgroup platform in client mode and ASCII/ANSI/RIP terminal mode. Vue-It allows optional file downloads and fax requests, which are controlled by key access. The client mode supports a print option. Vue-it also provides optional activity logging to the audit trail for download, fax and display requests. Look for more Worldgroup client applications from ProDesign, including upgrades to our Major Agenda, M.I.D.A.S and Fax Broadcast products.



PO Box 14314 • Albuquerque, NM • 87191-4314 Voice: (505) 244-0488 • Fax: (505) 244-0650 • BBS: (505) 244-0000 E-mail: sclement@nmol.com • MajorNet: sysop@nmo \$99

See us at BBSCON Booth #703 & 705



## Worldgroup A/V Registry



Jazz up your registry with pictures and sounds. You can search by User-ID or summary line. Information is transferred in the background eliminating long waits. Users can view thumbnail pictures before downloading them. Works with your current registry data. Simple scanning with previous and next on the toolbar. Integrated e-mail and printing of registry and pictures. Sysop can delete users' entries. Configurable Sysop approval of pictures and sounds. Pictures and sounds compressed on the fly. ASCII/ANSI support also.

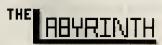
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See us at BBSCON Booth #TBD HEYRINTH

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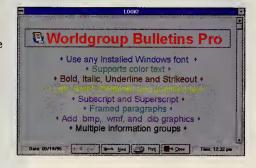
## Worldgroup Bulletins Pro

Worldgroup Bulletins Pro is a unique application that will add pizzazz to those boring ASCII/ANSI bulletins. A built-in mini word processor allows the Sysop to create bulletins very easily for both client/server and ASCII/ANSI users. The use of any font, size, color, underline, boldface, and/or italics is supported. Import BMP, WMF, or DIB graphics into your bulletins. Also, you can have multiple groups for different information. Limit bulletins by class, key, sex or age range.



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#### *xBasic*



xBasic is a powerful database module for Worldgroup. Using the xBASE compatible programming language you can design and implement relational database applications quickly and easily. xBasic includes an advanced set of functions used for taking advantage of built-in Worldgroup features such as: the Full Screen Editor, the line editor, file upload and file tag spec/download handler, e-mail, C function calls and user account database calls. xBasic supports an unlimited number of applications. And it also has image and WAV file support.

\$895

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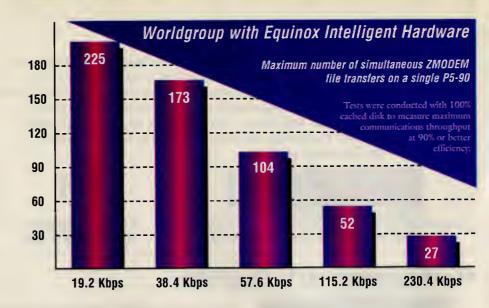
## Intelligent Serial Kit

Maximize your system's performance with the Intelligent Serial Kit (ISK). With Worldgroup and ISK, you can take advantage of intelligent multiport serial cards delivering screaming I/O performance on a single 486 or Pentium computer.

By offloading the nitty-gritty piping of data from the CPU to the intelligent cards, you can support over 200 simultaneous high-speed callers. Free up tremendous system resources, and give your system a major boost in overall throughput (over 590,000 aggregate CPS — more than double any other single-PC solution).

The ISK is an expandable I/O subsystem that uses Equinox's new RISC-based SuperSerial™ Technology (SST). Capable of up to 920 Kbps speeds, the SST eliminates all bottlenecks from the communications hardware. And you gain the reliability of surge suppression on every pin of every port.

The Intelligent Serial Kit is available in 8-, 16-, 32-, 64-, 96-, and 128-line kits. Each ISK includes the Worldgroup intelligent driver software, Equinox host controller, 8- or 16-port module(s), power supplies, cables, modem adapters and documentation.



Starting at \$845

**EQUINOX** 

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Starting at \$225

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## Sysop Program for Modems and ISDN Terminal Adapters

Now you can purchase compatibility-tested modems for your Worldgroup system and save up to 40% on selected Motorola V.34 modems and ISDN terminal adapters.

The following products are available to qualified members of the online industry:

- Power Series 28.2 modem offers on-screen help; caller ID; distinctive ring support; and more.
- V.3400 modem supports both leased-line and dial-up operation; top transmission speed of 115.2 Kbps; data and fax mode; and more.
- BitSURFR ISDN terminal adapter

   provides remote LAN access, telecomputing, video conferencing and Internet connections.
- UTA220 ISDN terminal adapter provides corporate video conferencing and LAN-to-LAN communications.

To be eligible for the Sysop program, you must be a qualified BBS Sysop, Internet access provider or World-Wide Web service provider; be in continuous operation for at least six months; and run software from an approved vendor, such as Galacticomm.

## <mark>n your BBS into</mark> an instant cash mach



#### **Accept Checks Online**

- U.S. and Canadian Accounts
- Same Day Processing
- BBSes Are Pre-Approved
- Instant Account Activation
- Increase Your Subscriber Base
- Capture Impulse Callers
- Lowest Processing Rates **GUARANTEED!**



**ABS Setup For Online Checks** With The Purchase Of Any MEGA MARKET™ System!

The ABS Payment Network™ is a collection of services that enables you to quickly and easily begin accepting payments online from your callers! ABS is the leader in designing cost effective solutions for the payment needs of the online industry. One-Stop shopping, convenience, standard setting software, and friendly customer service, that's what you can expect when you call ABS. ABS has the MAPP Certified POS Engine knowledge, experience, and software you need to turn your BBS into an instant cash machine! Whether you are just starting out, or shopping for better prices, ABS can help. Online Checks Direct!TM is our premier service where everybody is pre-approved! Accept check payments from your callers

our software modules. ABS Credit Card PayTM makes setting up your very own credit card merchant account easy and affordable. If you think you can't have your own credit card merchant account, you have not called ABS!



#### **Credit Card Features**

- Real Time Authorizations
- Subscriptions AND Online Sales
- Automatic Dial Out
- Full Managment Reporting
- Capture Impulse Callers
- quickly, easily, and securely online through Works Real-Time On Your BBS!



#### Credit Cards Online

- Accept Major Credit Cards!
- Fast Account Activations
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#### **Online Checking Features**

Instant Online Account Validation!

- Sysop Configurable
- Recurring Billing Features
- User Friendly Interface
- Advanced Fraud Control
- And Much, Much, More!



All Mega Market Series Software Fully Supports The ABS Payment Network<sup>TM</sup> and Utilizes The ABS POS Engine™

#### **Unsurpassed ABS Quality Service**

"I too have received excellent service and support from the guys and gals at ABS! Hat's off....(they) got me going and they even followed up with phone calls to make sure I got everything working...Keep up the good work!" CAPITAL CITY ONLINE

"To date, ABS has been the most outstanding third party billing service I've ever dealt with. You guys are top notch professionals." AFTER HOURS BBS

"Just thought I'd let all of you know that I feel your company (ABS) is bringing a great product to the market (online). Right on!" RMULLER

#### Software Available For...

- Major BBS PowerBBS Door.sys
- Worldgroup Excalibur Internet
- PC Board Media Host WUNIX
- Wildcat Windows
- Synchronet WWIV TBBS
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# ONSUMMATE WINSOCK APPS by Forrest Stroud

INTERNET SUITES

ast month I wrote about the emergence of an Lextremely competitive integrated 'net access software market (i.e. 'net suites). While I hadn't planned on continuing this thread a month later, several recent entries have prompted me to do so. Last month it was NETcetera jumping into the 'net suite war: this month several new combatants have entered the arena.

Net suites aren't the only apps currently claiming a sizeable share of the advertising 'net hype. The next several months will see the introduction of Virtual Reality Modeling Language (VRML) browsers the first of which has just been made available for Windows. At the same time, users will be demanding more and more real-time applications for both text-

based and voice-based conversation on the 'net.

**EMISSARY** Cool new 'net suite with the Desc: Emissary " advertising hype to back it up Positives: Excellent integration of six superior 'net apps, Edgar is \*sooo\* cool Negatives: The current beta release is \*extremely\* buggy, telnet app is less than outstanding Location: ftp://www.twg.com/pub/ Filename: EMIS???.EXE Free beta. Commercial Status: release in July - \$99 Company: Wollongong

In addition to delivering an excellent set of 'net apps, Wollongong's Emissary offers seamless, multi-threaded integration better than any other client I've used. Web browser, newsreader, local and remote file management, mail, and telnet services are all offered from one central interface. The speedy web browser is Emissary's strongest service and stacks up very well against the competition, offering many advanced features like background images, centering, and transparent GIFs (tables will likely be implemented soon as well). There is even a limited WYSIWYG HTML Editor available within the browser (press F2 when viewing any web page to modify it).

The local and remote file management services are, in a word, awesome. Transferring, deleting, and updating files from different locations has never been easier with this drag and drop interface. The mail client also shows signs of becoming a strong client, but currently its proposed multimedia mail is more hype than substance. The telnet client was the least attractive and efficient client of the suite - almost any standalone telnet client bests it. Unfortunately, I was not able to run the newsreader - it seems quite a few users have experienced lockups trying to access news.

Emissary is not without its faults. The current beta release has more than its fair share of bugs. This is not an app for the squeamish as of yet; I'd recommend sticking to the straight and narrow until Emissary is released in its commercial form. Thankfully, this won't be too long of a wait — by July, Emissary should be available for \$99. Whether you decide to try it out now or wait until the commercial release, definitely check this suite out.

#### QUARTERDECK INTERNET TOOLBOX A new, solid web browser with additional integrated applications Positives: Quick, fast caching, multithreading, great appearance, annotation feature. Negatives: Lacks Netscape's better features archives are lacking in breadth and depth of links Location: ftp://qdeck.com/pub/ normandy/qmosaic/ Filename: ISUITE??.EXE Status: Demo version - ceases to function on August 31, 1995 Company: Quarterdeck

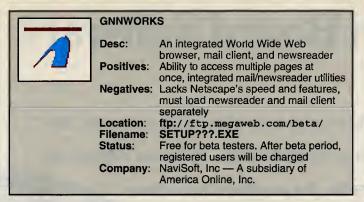
Quarterdeck's Mosaic client has gone from a very disappointing initial beta release to a very promising commercial suite of apps. QMosaic was previously offered only as a standalone web browser but has recently gained several new siblings, including external mail, newsreader, ftp, terminal, and 'net access clients. The entire collection of apps should be released soon under the "Project Normandy" codename, but for the next two months anyone can try out this very interesting suite of 'net apps.

The QMosaic browser remains the best application of the group and has several additional features since the last version including permanent caching, mailto support, and centering. QMosaic seems to have gained a speed infusion, as well. The annotation feature, another unique ability of the browser, has finally been added in a manner that doesn't detract from QMosaic's overall appearance. Unfortunately, QMosaic still lacks support for tables and background images. Also, the archives (installed bookmarks) could still be greatly improved — even links to such essentials as The CWSApps List and ESPNET's SportsZone are mysteriously missing in the archives.

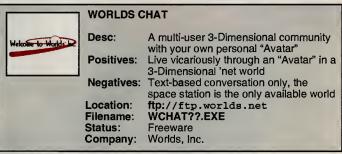
Unfortunately, the rest of the new clients in the Normandy suite fail to impress in their present versions. While the terminal app is useful, the ftp client still has many bugs and both the newsreader and the mail client aren't as feature-rich and easy-to-use as those found in Internet Works. Overall, this is a good collection of 'net apps that definitely warrants checking out.

The applications reviewed here and many more are available on Stroud's Consummate Winsock Apps List, at the EZNet Winsock Archive, http://home page.eznet.net/ ~rwilloug/ewa.html

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A web browser that allows access to multiple pages at the same time is the best app included in this suite. Integrated newsreader and mail clients also add value to this beta app. GNNWorks sports a very American Online look, which is no surprise considering Navisoft, Inc. (a subsidiary of America Online) now owns Booklink Technologies, the maker of GNNWorks. A modest supply of introductory bookmarks is another added bonus. Internet Works is also OLE 2.0 compliant. One unique feature of GNNWorks is its card catalog system - an interesting variation on the common bookmarking feature. Users can split the screen and monitor multiple sites at the same time and on the same screen. Users can either use their own Winsock stacks or use the one included with GNNWorks. The few negatives to GNNWorks include an inability to match Netscape's speed and multitude of features and also the fact that the newsreader and mail client must be loaded separately from the browser.



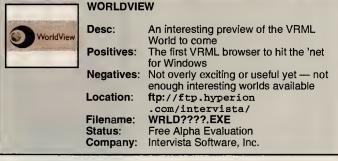
Worlds Chat takes text-based communication on the 'net to the next level by providing users with 3-Dimensional "Avatars" that interact in a multi-user 3-D community. The community itself is much like the VRML web sites expected in the near future — in fact, the Worlds Chat model may well be the best prototype for a VRML model I've seen so far. When the program first loads, you enter the Avatar Gallery and select one of fifteen possible Avatars. You're then connected to the Worlds server and your Avatar is placed within the 3-D dungeonesque environment. You can either explore or converse with other Avatars at this point. While exploring quickly grows old, the conversations are never dull. Worlds Chat is much like Ubique's Sesame, with the exception being that Worlds Chat does not run on the web. I wouldn't be surprised, however, if the Worlds Chat universe is implemented in a VRML model in the future.

Worlds Chat runs on all high-end Windows platforms (486/50, 8 MB of RAM and higher) and requires either a direct connection to the 'net or a SLIP/PPP dedicated line. The most important thing to remember in Worlds Chat is that you can only talk to the six Avatars closest to you. While Worlds Chat is restricted to only text-based communication, future products from Worlds, Inc. are expected to incorporate voice-based communication as well. Worlds Chat is unique and definitely merits checking out. And remember to say "hi" to the big blue bear in sunglasses named Neuroses when you get your own Avatar up and running.;-)

#### **REAL AUDIO** Desc: Real-time audio on demand for the web, finally Positives: Real-time audio on demand; server, studio, and player programs Negatives: RealAudio clips must be run from a specialized server in order to run in real-time http://www.realaudio.com/ Location: dloadintro.html Status: Freeware - however, you must first fill out the registration form Company: Progressive Networks

RealAudio is the first client to hit the 'net that allows you to download and run audio clips in real-time — i.e. the clips run while being downloaded, not after. With the size of many sound clips (250+ Kb not uncommon) and the sluggishness of the web, by RealAudio is indeed a blessing. By configuring your browser to run RealAudio when a \*.ra file is encountered, sound clips are started almost immediately after clicking on the file.

While listening to RealAudio files is great and all, there inevitably comes a time when you want to create and serve your own files. Progressive Networks (creators of RealAudio) has already created programs to create (RealAudio Studio) and serve (RealAudio Server) .ra files. The Studio version is in beta release and can be downloaded for free right now. You can create your own RealAudio clips with the Studio client, but you'll need a specialized server for running the clips on the web in real-time. If you decide not to purchase the RealAudio Server, Progressive Networks lets you create your files with RealAudio Studio and then hosts the files for you on their server. Overall, RealAudio is a class-act app that will appeal to anyone who has ever had to wait an eternity just to listen to a thirty-second .au or .wav clip.



WorldView, the first Virtual Reality Modeling Language (VRML) browser for Windows to hit the 'net, offers a preview of what the web may someday become. Unfortunately, a preview is about all that WorldView currently offers. Assorted 3-Dimensional "worlds" are included with the browser, but entering these worlds really means nothing more than viewing a 3-D object from various perspectives. The rotating globe that commences upon startup is cool, but beyond the globe, many of the objects are not exactly enticing. I might recommend checking WorldView out for a glimpse of what may become the future of the 'net.

This 32-bit client will work on high-end Windows 3.1, 95, and Intel NT platforms, with SGI, Sun OS, Mac and additional flavors of NT to follow later this quarter. WorldView will run .wri models and is fully VRML 1.0 compliant. WorldView does not need a web browser to function, but it does integrate well with Netscape as an external viewer for .wrl models. If and when extensive and interesting worlds are created, WorldView may well become a viable VRML browser; however, at this point, it isn't much more than an interesting oddity. ◆

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Angeles, California.

Prior to practicing

law, Andrew ran a

Bloomington, Indiana

for Connecting Point

Computers. He is

married to Wendy, and is expecting

28 years old,

his first child in

December 1995.

bulletin board in

Andrew's e-mail

# ADVENTURES IN LINUX

by Andrew Selman

#### "A KERNEL? BUT I DON'T WANT ANY POPCORN!" - PART 1 OF 2

If it can go wrong, it will. - Murphy

When we parted company last time, you had just created the Linux boot and root disks in DOS and stored them safely until this issue. Well yank 'em out 'cause it's almost time to use them. But first, we have to talk about more planning. What? Did I hear an audible groan? Don't worry, for this part I'll be short and sweet.

#### WHAT TO CHOOSE, WHAT TO CHOOSE?

As I pointed out in my last column, it is essential to plan ahead in Linux and in just a moment you'll see why. The Linux distribution often comes on a CD-ROM. However, that didn't stop them from using the "disk set" scheme that is prevalent on the Internet. So for those of you taking the files from the Internet, pay attention. I'm about to save you download charges.

The disk sets are named with various letters:

N ...... the Networking utilities

A .......the basic Linux package

AP.....additional essential and basic programs

D .....programs necessary to recompile the kernel
and generally mess with the code

F .....every FAQ and "How-To" file

These are the basics that you should initially install. You can install the other disk sets later straight from the CD-ROM, so don't worry that I skipped a bunch of the disk sets.

If you are downloading the **Slackware** version from the Internet, you'll want to grab disk set **Y** because it has all the games (including the unregistered first version of DOOM) and possibly disk sets **X** and **XP** because they contain the *Xwindows* operating system. However, these three sets are not vital to what we are doing now, so hold off on these if you don't want to send your Internet fees into orbit.

Disk space is another consideration in determining which disk sets to install. If you don't have it, you can't put all this stuff on it. Unfortunately, Slackware does not keep a list of diskspace requirements for each disk set. However, you need at least 7 megabytes to install just the "A" series of disks. According to Matt Welsh's Linux Installation and Getting Started, a very rough estimate of the required disk space would be 2 or 2.5 megabytes per disk.

In any case, let's turn to preparing the disk drives.

#### YOUR FIRST LINUX BOOT

Go ahead and put the "BOOT" disk you made earlier into your boot floppy drive. Shut the door, just like your I.Q. was normal, and reboot. The boot program will ask for additional startup parameters. If you have at least four megabytes of memory, press return. However, installation with less than 4 Mb of RAM is tricky. You can try to mount the file system from the floppy drive. From the Boot disk you will be asked if you would like to enter any additional parameters with which to boot the system. Enter the command mount root = /dev/fd1> or <mount root = /dev/fd0 to install the system without a RAMDISK. For additional tricks, read the file LOWMEM.TXT in the root directory of the Slackware distribution disks.

Linux will begin to boot and will eventually ask you to change diskettes. Do so, replacing "BOOT" with "ROOT" and press Return. When your drive stops spinning, you'll get the message to login as "root" and begin formatting your hard drives. Congratulations! Linux is running on your machine. Well, don't get too excited. Linux doesn't do anything yet. You'll have to do some calculations and organization of your hard drives.

#### FDISK AND PARTITIONS: TRIAL AND ERROR AT ITS FINEST

Get a pencil. Yes, I'm serious. Now write out how many hard drives you have and leave some space. Let's plan how to use the space on our hard drive effectively. Again, I'll use my system as an example.

Earthnet has two main hard drives. The first drive contains our DOS/Windows-based files as well as our Linux root files, for which we have allocated about 160 megabytes. Keep in mind that the files in /usr can be moved to another drive. However, the other files need to stay together on the boot drive so that Linux can boot correctly. The remaining 140 megabytes will be dedicated to the Linux root files or any file not under the /usr directory.

Our second drive contains most of our other Linux files that reside under the **/usr** directory. I'm assuming that if you are reading this with particularity, you have experience with some flavor of UNIX. If not, I'll explain later, don't worry.

Now, enter the command fdisk. The program will tell you that it is using /dev/hda as the default. This means that Linux is looking at the first hard drive that it found. Probably the one popularly known as the DOS "C:" drive. Fdisk then displays the following prompt:

#### Command (m for help):

Entering m will provide you with a list of all of fdisk's commands. Enter p to print the current partitions on your hard drive. A sample system listing might look like this:

Example Linux Disk Partition Listing:

Disk /dev/hda: 16 heads, 38 sectors, 683 cylinders

Units= cylinders of 608 \* 512 bytes

Device Boot Begin Start End Blocks Id System
/dev/hda1 \* 1 1 203 61693 6 Dos 16-bit >=32M

Enter n to add your first new partition. The first question is whether you want a primary or extended partition. We chose primary, as we have not yet made more than four partitions. If you are just starting, pick primary. Next, you will be asked for the partition's number. Since you already have one partition, choose to add primary partition number 2.

You will then be asked for the starting block. If you have all the DOS space you need, begin your second partition after the end block of the first partition. In this case enter **204**. You will then be asked to enter the part size in blocks or in megabytes. If this is the only other partition on this disk, enter the ending block number offered by fdisk under the header **End**, as in the listing shown above.

The amount of DOS space you want to leave on your hard drives is entirely up to you. We left room for Windows, Wordperfect and some accounting packages that help us manage Earthnet. What you want to keep is your preference.

Keep in mind that you will need to maintain a Windows Swap file as well as a Linux Swap file. It is very difficult to share the same swap space between Windows and Linux so don't try it until you really get the hang of your new system.

Also, make sure you consider the swap file in determining how much DOS space you need. Remember, the more RAM you have, the less swap space you need. Since Earthnet has 24 Mb of RAM our swap space requirements are small and we maintain about a 10 Mb swap space for both Windows and Linux.

However, if this is not the *last* partition on your disk, you can do what we did. We choose to put a swap partition on this drive. See the following section, "Setting Up a Swap File" for a discussion of the pros and cons of doing so. We asked fdisk to create an 80 Mb partition. This left enough space for a 10 Mb swap partition. A listing of this exchange of commands looked like this:

Creating an 80 Mb Swap partition using fdisk:

Command (m for help): n
Command action

e extended

p primary partition (1-4)

р

Partition number (1-4): 2 First cylinder (204-683): 204

Last cylinder or +size or +sizeM or +sizeK (204-683): +80M

We then repeated the steps above to create the next partition. We made primary partition number 3, set the first block at 474 and set the end block at +10M (the end of the drive). Now, enter **p** once again and confirm that your partitions are set correctly and that none are overlapping. Our sample listing now looks like this:

Earthnet'	s Linux	Partiti	on Lis	sting:			
Disk /dev/hda:	: 16 heads, 3	38 sectors	, 683 cyl	Inders			
Units= cylinde	ers of 608 * 5	512 bytes					
Device	Boot	Begin	Start	End	Blocks	ld	System
/dev/hda1	*	1	1	203	61893	6	Dos 16-bit >=32M
		204	204	473	82080	81	Linux Native

Next enter t to change the partition type for /dev/hda3 to Linux Swap, Type 82. This converts the partition from Linux Native (type 81) to Linux Swap (type 82), the swap file used by Linux as virtual memory. When you choose t, fdisk will ask you which partition and partition type you wish to change. Be sure to specify partition /dev/hda3 and type 82, Linux Swap. Incidentally, if you know something of disk swapping from Windows or OS/2, then you know enough to be dangerous here. As you can see, with 24 Mb of memory, we created only a 10 Mb swap partition.

If everything looks good, enter  $\mathbf{w}$  to write the parameters to disk. The program will verify your partition writes, remount the hard drives and exit.

If you have a second base drive, as we do, enter fdisk /dev/hdb to run fdisk on your second hard drive. You will not see a DOS partition here unless you have DOS files on this hard drive.

Our second drive is dedicated solely to Linux, but this decision is entirely up to you. Moreover, you do not need an additional swap partition here. Simply set up primary partitions one through four here and determine their size. Check that you got everything right by listing the partitions with the p command, write down the size of your partitions, enter  ${\bf w}$  to write and exit.

Now, reboot with the diskettes as before. Come back when you login as **root** again.

Additional hard drives on a system can be added in what should be an obvious pattern. Each subsequent drive will become /dev/hd\* where \* is the next letter in the alphabet. If you are hyper-organized and need more than four primary partitions, use extended partitions. We didn't use them at Earthnet so I'm not going to pretend I know all about them. Please refer to the Linux manual for additional information.

#### **SETTING UP A SWAP FILE**

A swap file in Linux has a similar function as its cousins in Windows and OS/2. It acts as virtual RAM and is required by Slackware if you have 4 megabytes of RAM or less. The Slackware installation program can do this for you if you'd like. But, if you are a purist, use the following directions.

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The command used to prepare a swap partition is mkswap. It is invoked from the command line with

#### mkswap -c <partition> <size>

where <partition> is the name of the swap partition you created earlier, and <size> is the size of that partition in blocks. Aren't you glad I told you to write it down before? The -c option tells mkswap to check for bad blocks on the partition when creating the swap space. Now, since in our example the swap partition is /dev/hda3 and is 10336 blocks in size, use the command

#### mkswap -c /dev/hda3 10336

After formatting the swap space, you need to enable it for use by the system and although the system enables it at boot time, you must enable it by hand when it is first created. The command to enable the swap space is swapon <partition> - in our case, swapon /dev/hda3.

Simple, huh? We're just about ready to get to the fun stuff.

#### "SETUP" - THE SLACKWARE **INSTALLATION PROGRAM**

Ready to set up the file systems and install some files? Good. Now, from the command line, enter the command setup. Buzzing, banging, whirring and a nice colorful screen full of choices to be made. If you want a jolt of caffeine or a bathroom break go for it now, because I'm about to take you the long way. I'll tell you how to cheat a little later. But don't bother looking ahead of time, it defeats the purpose.

By the way, the choices presented next are specific to the color144 and colrlite root disks. Other root disks may have slightly different procedures. Below is a discussion of some installation choices and files decisions for your system.

#### HELP

Let's start you off with an easy one. This command invokes the help file for setup. The information in this selection bears taking a glance at, as you can never have too much information.

#### KEYMAP

This option allows you to select various non-U.S. keyboards. A list of keymaps will be offered.

#### QUICK

Here's the shortcut I promised. This allows you to select between "quick" and "verbose" installation modes. "Verbose" is the default, and I recommend that you use the default until you have installed Linux a few times. You will install Linux several times and "Quick" makes life a little easier.

#### **MAKE TAGS**

This option allows Linux gurus to modify the "tag files" used in the Slackware installation for preselecting packages. This is necessary for customizing the installation. My recommendation is not to modify them. A lot of hard work by people who knew better than you and I went into creating the tags. As a first time installer, just don't mess with this stuff. You have other things about which to worry.

#### **ADDSWAP**

This section will likely be among the first things you mess with during this part of the installation. However, even if you followed the directions above for the swap file, you still need to use this option to ensure that the partitions will

be available once the system is installed. As a final note, be aware that creating a swap partition destroys data on that partition. Therefore be sure you don't have any data on it you want to keep.

Next issue we'll finish with the setup program and delve into specific program selection.





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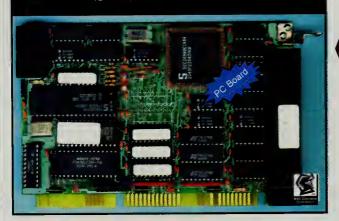
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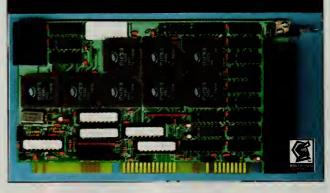


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# LEGALLY ONLINE

#### THE MANY INTERFACES OF FREEDOM, PART II

"By giving distributors the

right to distribute publica-

tions without monitoring the

the Supreme Court promoted

the development of a free

speech infrastructure."

contents of those publications,

by Lance Rose, Esq.

Two months ago, we reviewed four traditional . "First Amendment" areas that are being tweaked in new ways as the Net population starts looking more like a real society:

- (1) the protection of "press" operations from government interference,
- (2) the limits on libel lawsuits, which let us talk about famous people without getting sued,
- (3) the ever-shifting limits on the government's power to squelch adult materials, and
- (4) the continuing tension between copyright laws that prohibit copying the works of others, and the supposedly "free" speech guaranteed by the Constitution.

The sequel to that column was due last month, but we took a break to consider the recent New York court ruling that left Prodigy liable for up to \$200 million in damages. It's kind of an O.J. case for the online set. When the dollars get that high, inquiring minds want to know, and to heck with two-part columns.

Now, back to our regularly scheduled sequel. Entire new fields of First Amendment protection, barely developed up to now, are being explored as a result of conflicts in the exploding online world. This month, we round up three of these areas:

- (1) the protection of online systems that distribute the speech and publications of others,
- (2) the right for each of us to act anonymously online,
- (3) and the right for groups of people and businesses to gather freely online.

#### SEX, TERROR AND OTHER UNPLEASANTRIES: **CAN YOU BLAME THE MESSENGER?**

As everyone ought to know, the U.S. Constitution guarantees freedom of speech and freedom of the press. Yet if we look closely at the exact words of the Constitution, it appears they didn't spell out exactly how those rights would be protected. I have freedom to speak, but what stops the government from blocking my words before they reach the listener? I have freedom to publish, but what stops the government from shutting down shipments of my newspapers to newsstands, stores and people's homes? In our current mass media society, these questions are critical: how can any broadcaster, publisher or other mass medium truly be guaranteed the ability to address our nation, if the government permits them to say what they will, but keeps their messages from reaching the public?

This kind of literal reading, in which the Constitution is seen as creating a right but no means to enforce it, would nullify freedom of speech altogether. Freedom of speech would be a paper right only, while the government would retain the full and effective power of censorship. Luckily, the Supreme Court stepped in, declaring in U.S. v. Smith that the Constitution requires more than simply

> letting people speak and pubresponsible for the obscenity.

lish. There is another right against government censorship, just as fundamental: the freedom to distribute speech. In Smith, this meant book sellers who inadvertently (and unknowingly) carry books with obscene materials are not

Without such a rule, merchants would become a bottleneck preventing the effective circulation of printed materials; they would be forced to scour every book for illegal materials, leaving them scarcely any ability to sell those books to the public. By giving distributors the right to distribute publications without monitoring the contents of those publications, the Supreme Court promoted the development of a free speech infrastructure.

We must remain clear, though, that the freedom to distribute speech is meant only to protect legal speech. The logic of the rule is this: requiring book stores and the like to review their printed goods for legality will surely slow their businesses to a crawl, or even put them out of business. Lifting that burden will inevitably allow some illegal speech to be swept along in the current of predominantly legal speech, but that's a tradeoff we can readily make. It is our only real chance at achieving true speech and press freedom in an imperfect world.

However, acknowledging that some illegal materials will pass in commerce when we free distributors from monitoring burdens does not mean it is okay to

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distribute illegal materials on purpose. A book store owner who *knows* he is selling obscenity has no protection under the Supreme Court's rule in *U.S. v. Smith*.

The distributor protection principle of *U.S. v. Smith* was extended readily, first to magazine distributors, then to online services. In the now-legendary case of *Cubby v. CompuServe*, CompuServe was excused from a federal libel lawsuit over damaging statements in an electronic newsletter, because CompuServe was only a distributor of the newsletter. For a while, things looked pretty good for extending this principle in other cases involving online systems. Recently, though, the law on First Amendment protection for speech distributors has fallen into a muddle.

The first legal ruling conflicting with this principle was in *Playboy v. Frena*, where a federal court in Georgia held a BBS responsible for copyright infringement by image files held on the system, regardless of whether the system operators knew about the infringing files. We can't really say the judge didn't buy the argument that speech distributors have First Amendment protection, because his decision does not even discuss the First Amendment (we wonder how much the BBS defense attorney featured the First Amendment in his arguments to the court).

Despite this ambiguity, *Playboy v. Frena* introduced the possibility that online systems may find themselves legally forced to review all of their messages and files

for copyright infringement. This is not a done deal, however. Another federal court in Los Angeles recently held, in Church of Scientology v. Ehrlich, that neither a local BBS nor large Internet service provider Netcom would be required to monitor their message traffic for copyright infringements, at least while the case is pending. Also pending is Frank Music v. Compuserve, in the same federal court where the Cubby case was decided, which asks the musical question: can CompuServe be held responsible for copyright-infringing music files passed between users on its system, even though it is not responsible for libelous newsletters?

The next problem holding appeared in Stratton-Oakmont v. Prodigy, where a New York state court judge dealt

expressly with the question of distributor protection under the First Amendment, but declared online system Prodigy a "publisher" instead of a distributor, and thus ineligible for that protection. This decision turned largely on the judge's view that Prodigy's marketing of its system as a "family service" automatically made it the equivalent of a newspaper publisher, even for messages posted by users to other users.

"Given the persistence of

the moralists... we should

expect to see some sort of

Internet) regulations pass

into law in the near future."

adult material (on the

While the judge indicated respect for the CompuServe v. Cubby holding, his reasons for denying "distributor" status to Prodigy (which is functionally very similar to Compusional compusion of the compusion of th

Serve) were troubling, and would put all online systems at risk of being considered "publishers" rather than distributors if they found themselves in a New York court. Luckily, the case is still pending and the decision will be appealed, hopefully with a better result.

While the cases tangle and (hopefully) disentangle, there is a bigger threat to First Amendment distributor protection developing in Congress. Most well known is the Communications Decency Act (also known as the Exon Amendment), which would place a high-

er responsibility on online systems to keep obscene materials offline, and to control access by children to non-obscene adult areas of the system. It would also give the FCC direct jurisdiction over online sys-

tems for this purpose, a prospect that doesn't exactly thrill the industry. As we go to press, it is uncertain whether this bill will become law. It passed the Senate easily, but Rep. Newt Gingrich, the House majority leader, has spoken out against the measure as restricting adult access to adult materials too sharply in the name of protecting children from such materials.

Even if the Communications Decency Act fails, there are several me-too bills waiting in the wings in the Senate, including an online pornography bill proposed by Senator Dole as a follow-up to his recent election trail screed against immorality and degradation in our mass entertainment media. Given the persistence of the moralists, along with the growing legions of parents concerned about the horrific materials their kids may be digging up along the info highway, we should expect to see some sort of adult material regulations pass into law in the near future.

Even worse, various states are looking into enacting their own online decency laws. One was nearly enacted in Washington state, until it was vetoed

by the governor. If anyone thinks federal regulation of online adult materials is rough, consider running an interstate online system (which virtually all of them are) and worrying about the

adult material laws of not only the federal government, but several dozen states as well.

In the face of government's and moralists' will to regulate, online services and their supporters have introduced alternative ways of approaching the problem of adult materials online, of which two are especially notable. First is a bill sponsored by Senator Leahy, calling for the federal government to study both the need to keep adult materials away from children, and the need to enable online systems to distribute speech effectively without burdensome government regulation. The other is an effort to put useful controls into personal computer software, letting parents regulate their kids' access to online adult materials. This will permit parents to make their own decisions about what their kids can and cannot see, arguably a far better way to protect children than overwrought laws resulting from the political force of paranoid interest groups.

The other major potential Congressional inroad on First Amendment distributor freedom is a bill sponsored by Senator Feinstein, supposedly directed at use of the Internet by terrorists. The bill would make it a crime to give access to bombmaking instructions online, where the system provider has reason to believe those instructions might be used by someone to make a bomb. This legislation apparently grew out of hearings related to the recent tragic Oklahoma City bombing, even though online activities have not been implicated in that event, either in terms of distributing bomb-making instructions, or online coordination of the efforts of those who did the bombing. As commentators have

pointed out, bomb-making instructions and information are widely available in printed form, everywhere from encyclopedias to the government's own publications that show farmers how to make fertilizer bombs. Nonetheless, it is the pretext for the latest attack on online systems.

When it was pointed out to Sen. Feinstein that her bill would be an

"When it was pointed out to

Sen. Feinstein that her bill

would be an unconstitutional

"prior restraint"... reportedly

she retorted that... the First

be revisited."

Amendment may also need to

unconstitutional "prior restraint" of online systems, reportedly she retorted that the prohibition of "prior restraints" under the First Amendment may also need to be revisited. Sen.

Feinstein appreciates that there may be a First Amendment dimension to her attempt to muzzle online systems on the subject of bomb-making instructions. She just doesn't believe the First Amendment is that important in this case. This, by the way, is a common theme in all arguments against strong First Amendment protection for online systems: sure, the ability of these sys-

tems to distribute speech is protected under the First Amendment, but in my case the wrong involved (be it copyright infringement, libel, terrorism, pornography, take your pick) is so important that we have to give the First Amendment a rest.

To date, the principle of distributor protection under the First Amendment has received some recognition, but it has also

come under serious attack in a number of arenas. We should expect both of these trends to continue, as new areas of conflict arise. Already on the horizon as new distributor liability areas are false advertising, securi-

ties fraud, pedophilia and child pornography, and online gambling.

For online systems, the only way out of the seesaw battle between First Amendment protection and denial of that protection in the U.S. would appear to be a federal law generally recognizing the protected role of online systems in the distribution of speech. There was a serious attempt to craft such a law several years ago in the form of an "Electronic Forwarding Act," but it is questionable whether such a law can be enacted now, after so many forces seeking to pin liability on online distributors have been wakened.

#### GATHERING TOGETHER — THE ESSENCE OF ONLINE COMMUNICATIONS

Canter and Siegel, the sometime attorneys who enraged the Internet by their "spamming" run that placed advertisements in thousands of unrelated USENET newsgroups, recently published an opportunistic book about marketing online. There, they claim there are no "communities" online. It is just a vast collection of disparate individuals who happen to be using the same channels of communication. It is easy to see why they hold this view. If there are no communities online, then Canter and Siegel can consistently maintain there are no community norms or practices offended when people like them blare ugly, unwelcome advertisements all over the place. At this point, the reader is hopefully asking why we are wasting this much ink on Canter and Siegel.



The answer is that they exemplify a view of the online world which could not be further from the truth.

In fact, if anything could be called the essence of online activities, it is the ability of groups of people from across the planet to get together cheaply and frequently online. Sometimes we call these groups "communities," at other times they go by other names. The popular older media of the past failed miserably at this organizing task. Telephone and mail systems are fine for

one-to-one communications, but hopeless at coordinating a group in any time frame faster than molasses. Newspapers, television and radio can reach huge groups of people quickly, but they are

one-way media. Only with online systems, and in particular bulletin boards, USENET, mailing lists and other conferencing functions, do we have a fast, long-distance medium capable of enabling small and mid-size groups to meet and function effectively. In-house at large organizations, Lotus Notes and other groupware systems are performing a similar function.

The social changes resulting from this new capability have barely begun to surface. Among other things, trade groups and unions are finding it much easier to coordinate their activities day-to-day, without as much need for in-person meetings and painstaking printed newsletters. Publishers and other businesses are using bulletin boards, forum areas on large online services, and the World Wide Web to communicate directly with their customers and fans. Social, political and hobbyist groups of all kinds are now routinely using online systems to coordinate their activities. Ultimately, the ability of online systems to leverage and multiply the power of geographically dispersed groups of people will lead to new shifts in power. Exactly what those shifts will be, and who will gain and who will lose power, is hard to predict among the many threads of online development underway.

#### **COMMUNITY BUSTERS**

The threat has already been registered in certain quarters, however. The most notable event involved SCARCNET, an anti-tobacco activist group that meets

secretly online. All prospective participants in SCARCNET must undergo rigorous screening before being allowed to view or participate in the group's activities. The possibility of a mole from the tobacco companies sabotaging the group from within is especially high, so background checks and personal references from existing SCARCNET members are always required. Since putting up its private bulletin board, SCARCNET has become a constant threat to the ability of tobacco companies to do business in this country.

A couple of years

ago, a tobacco com-

pany struck back

with an attempt to

dismantle SCARC-

NET. In a lawsuit

brought on a claim of

injury based on pro-

"Ultimately, the ability of online systems to leverage and multiply the power of geographically dispersed groups of people will lead to new shifts in power."

> longed cigarette use, SCARCNET's name came up. Soon there was a motion requesting the judge to order that SCARCNET reveal the names of all of its members. SCARC-NET fought back, correctly pointing out that the First Amendment right to associate includes the right to keep the identities of group members secret in

> This principle was strongly stated by the Supreme Court in NAACP v. Alabama. The court held that the state could not force the NAACP to reveal the names of its members, since the members could then be individually harassed as a way to weaken the group in a divide and conquer approach. This

principle, endorsed in many lower court cases since then, seemed particularly appropriate to SCARCNET. Compromising its secrecy by revealing member names would strip it of most

certain cases.

of its effectiveness, since the tobacco companies would then have a complete portfolio of their most dangerous and effective opponents.

Unfortunately, the other shoe never dropped publicly in this affair. The last news on this motion was that it was postponed until the judge decided, first, whether the underlying tobacco injury case would proceed.

Whether or not one agrees with SCARCNET's goals, the attack on its existence is important for all online groups, whether aggressive or benign. The First Amendment right of freedom of association, which SCARCNET tied from offline origins to its own online activities, could be a pivotal legal means to protect and preserve the new organizing capabilities of the Net. Yesterday, an anti-tobacco group was attacked. Tomorrow, it could be online groups of gay people or Afro-Americans; anti-war protesters; or people who disagree with Bill or Bob. Given the vast advantage in organizing presented by online systems, freedom to associate increasingly means freedom to associate online. Hopefully, this will be recognized as both an effective legal principle, and profound social goal, in future court tests.

Another kind of attack on online organizing has been occurring through the frequent raids of computer bulletin boards by government agents. The raids are always directed at particular offenses, such as charges that obscenity or copyright-infringing materials were distributed through bulletin boards. At the same time, however, these raids almost always shut down the activities of groups of people, none charged with any crime, who were using that online system as a meeting place. Thus, government agents are regularly interfering today with the freedom of normal citizens to congregate online. Hopefully, this interference is inadvertent. It is disturbing to speculate that the shutdown of online group activities might be viewed by law enforcement officers as a bonus flowing from their system seizures.

> Similarly, the U.S. government's ongoing efforts to increase its surveillance of online activities has an obvious effect on online organizing. The digital wiretap ability now

being installed in our nations' telephone switches assures that every online door will be left slightly ajar, in case government agents want to find out what people are doing. Try to keep them out by encrypting our messages? Sure, except that FBI director Freeh has stated publicly that if encryption frustrates FBI surveillance activities, they'll seek a law forcing everyone who uses encryption to entrust the means of decryption to the government.

"The U.S. government will continue its holding action against the power of online communications, but at best they will only

slow things down a bit..."

The terrorism-related laws flowing out of the Oklahoma City bombing include broad new authority for the FBI to infiltrate and investigate groups suspected of "terrorist" activities. For instance, if publicly criticizing FBI director Freeh makes someone suspicious as a potential terrorist in the FBI's eyes, no matter how far-fetched such a suspicion might be otherwise, then this law could allow them to look at the online activities of the person leveling the criticism.

The U.S. government will continue its holding action against the power of online communications, but at best they will only slow things down a bit, and cause some unnecessary discomfort and paranoia. The social force of networks' organizing capabilities is enormous, and will ultimately play a big part in reshaping existing nations and forming new ones.

This country is built, in part, on giving us just such a freedom to associate, as long as it does not amount to treason. Hopefully, now that the power of normal citizens has been lifted to a level of vastly greater effectiveness by online communications, our government will not seek to back out of its Constitutional promise to give us always the freedom to associate.

#### **EVERYMAN WITH 1,000 FACES**

Many people act anonymously or under an assumed name online. Often, they use this capability to explore social regions previously out of reach: men pose as women, women as men, children as old men, gay people as straight and vice-versa. They can influence others in ways nearly impossible in the physical world, cutting through boundaries of pomposity, class and institutional affiliations with ease.

A gum-popping teenage mall rat might be thrown out of the offices of a Fortune 500 corporation if she showed up without an invitation, but under another guise online she could impress highpowered company executives with the clarity and power of her business insights. (See "People Online" in this issue. - Ed.) Conversely, by posing as other kinds of people, we can learn a lot about how they experience life in our society. Try going online as a member of the opposite sex, or as someone with a different personality, and the effects of social reactions on the formation of one's own personality and attitudes will quickly become clear.

Online anonymity can also be used in pursuit of more traditional activities, such as political organizing and activism. In this area, it is becoming increasingly likely that people will receive First Amendment protection when they choose to speak anonymously. In the recent case of McIntyre v. Ohio Education Commission, the Supreme Court held that the state could not force a local activist to identify herself on political leaflets she distributed at a local school board meeting. Part of the decision turned on the fact that the state law in question singled out political speech as the subject of regulation, a legislative approach so inimical to freedom of speech it is rarely sustained when tested in federal courts.

However, the Supreme Court also waxed eloquent on the virtues of anonymity, singling out three in particular. First, it permits the creation of great and controversial works of literature, art, and satire so provocative that the creator might forego the project if he or she could not produce it under a pseudonym. Second, it enables citizens to voice sincerely held political opinions which could, if they were identified as speakers, lead to loss of a job or being cast out of families or other social groups. Third, it enables speakers, such as our gum-popping teenager, to voice their opinions free of identifying information so people will take them seriously, and not discount the ideas based on knowing the source of the ideas. These reasons all apply perfectly and equally well to online discussions, and thus we should expect full First Amendment protection of anonymous political speech online.

What about anonymity for speech that is not particularly political, such as the identity-switching games described above? These activities are also valuable, but for different reasons. They advance social harmony by enabling people to understand how others view the world: "walk a mile in the other man's shoes" becomes "log on for a week under the other man's user name." They help personal growth as well, enabling people to understand better which aspects of their attitudes and self images are based on the contingent accidents of race, sex and appearance, and which are anchored more deeply in their minds and souls.

There is also a lot of talk now about anonymous online purchases, using digital cash. The value of anonymity in this case is that it lets people go shopping and exploring online without leaving information about their identities along the way. Some people are just not thrilled at the prospect of having their names compiled into thousands of mailing lists, and into grand databases laying out the patterns of each of their lives, each time they go on a little Web run.

Achieving First Amendment-based protection of anonymity against government prying in these circumstances lies ahead of us, if it happens at all. Where the activities in question aren't overtly political, the courts don't have that obvious "political speech" hook to hang their hats on. Are freedom to explore others' lives, and freedom from having our daily activities compiled into commercial databases, strong enough reasons to sustain a right of anonymity? Perhaps.

We must also observe, though, that there is some growing resistance to online anonymity. Recently, it was expressed aloud in the anti-terrorism Congressional hearings that followed the Oklahoma City bombing. One of the Senators reportedly opined that anonymity online was not very important if it might be used to cloak the activities of terrorists operating online. True enough, when you put it that way. But if all our policies become caught up in efforts to tie the hands of terrorists, we will quickly find ourselves trapped in a totalitarian regime. On the other hand, if we manage to stop short of this dead end result, we may also salvage some anonymity rights, enabling us to explore more fully the new social dimensions of online communications.

Considering these new areas of First Amendment rights helps us appreciate just how vast a change in society is portended by online communications. We're not talking about an end to hunger, cruelty, or war, or the keys to universal wealth, any more than any other major advance in society was able to bring us these things. However, the changes that will occur are so far-ranging we can see most of them only in dim outline. As we learn to assimilate online communications into our lives, and explore every new form in which the online world presents itself, our laws can work either as shackles based on fear, or implements of freedom. I submit that proper application of First Amendment principles will help us emphasize that freedom, and leave the fear behind.

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and her work can be

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# PEOPLE ONLINE

by Phyllis Phlegar

#### THE LIFE AND CYBERTIMES OF A TEEN

To matter how much things change for teenagers, some things stay the same; the struggle between adulthood and childhood, sex and coming to grips with one's self-esteem. My teen years were no exception. My family moved from the NYC metro area to central North Carolina, just in time for my 8th grade year.

I hadn't thought that much about my "secret world" until recently when I visited a teen forum on one of the national services. For many teens, this forum was their secret world, their youth group, a place to be themselves and be accepted. Teens nowadays are using cyberspace as a social gathering place, a support group, a reference library and a place to interact with adults on a very different level than is possible face to face.

My first, extremely naive thought was that I'd make lots of new friends. I had no idea how comOne of the teens I met was Manny, who said, "Besides the vast reference libraries online, I also like the inter-

pletely a "Yankee" would be rejected by Southerners of the mid-60's. The harder I tried to fit in, the more I was shunned. The lack of acceptance was overwhelming, even though I was getting some positive attention because of my good grades.

action. Online, you lose the stereotypes, because age, sex, race, etc. - all those things people judge on first impression - are unknown, so people have to get to know your personality instead. We all sign on equal; people won't judge you from appearance."



Another teen, Cook, alluded to the secret and special world that cyberspace can be: "It's a different environment than what we interact with in the 'real' world. But that experience opens up our eyes to other things. To learn and grow and experience is key to developing and being a teen."

Adam, cyberteen of today

Then, Cookie commented on the face to face world in high school and how they view the "secret" world of cyberspace: "I think that teens who aren't online regard (cyberspace as a place where) computer nerds get social lives."

youthful

Phyllis

Early in the 10th grade, my clergyman told me about a mid-Atlantic youth group that was looking for representatives from North Carolina. I came, I saw and I conquered with a very different group of teens. I was accepted, and eventually was voted into office and became very popular. My social life became a secret world. I was having a wonderful time and didn't need to try and fit in at home.

Recently, I got a letter from 15 year-old Adam e-mail://traveler@omni.voicenet.com - who had just read my May Boardwatch article about the not-too-friendly sysop whose treatment I found shocking. Adam was so surprised at my reaction that he wrote and said "I don't understand the approach to your article. You write books on communications and yet in this article you sound so naive. I mean, we're living in the world termed 'The 90's' which is a euphemism for 'Everyone is an ass."

He went on to say that rudeness online doesn't surprise him, and kids in school are rude too. He then assured me that he wasn't, as he put it, some "cyberspace schmuck" but that he really was completely baffled by my article. Adam went on to say, "I think that many people who read this article will say to themselves like (I did), 'What the hell is wrong with this lady?"

I told Adam that while the 90's may be considered an era when "everyone is an ass," I refuse to play. He may be right that a lot of folks — online and otherwise — are jerks. I may seem a fool to be very offended when someone acts like an ass. But any other reaction on my part would mean that I accept such treatment. I didn't like it when I was a teen, and I especially don't like it now.

Adam's letter, though blunt and critical, didn't offend me at all. Reading it, I could see that Adam probably had been mistreated. In his attempt to validate his experiences, he asked me why I would be so annoyed by a negative experience online. I told him that he doesn't deserve to be treated crappy either.

Adam replied that he was amazed that I answered at all, and he began to talk about his problems as a teen. "I feel like I'm boring you but it's nice to write to someone and tell them (my problems as a teen). I haven't met someone yet — besides yourself — who I felt really this comfortable talking to."

One problem that Adam has is getting a job writing for his local newspaper. No one will pay any attention because of his age; they assume he's going to be yet another rude 15 year-old. Adam has seen enough inappropriate behavior on the part of his peers to agree with those adults!

Too busy to be rude, Adam kept looking for writing jobs by using the list of newspapers in June's issue of Boardwatch. He went to each Web page and got the e-mail addresses of the editors of all the papers. He wrote to about 35 papers and within hours received 6 responses. Using his favorite WEB searchers he found more newspapers. I could tell he was excited when he said "Overall I think I may have written to more than 60 papers! I figured I would get the same response that I did from the papers locally. So far, I was very wrong about that! (For the most part) they were very positive. Perhaps, after a while writing with these papers, I can call back and tell those editors who refused me locally about my experience and they'll change their minds."

Meanwhile, he still has to deal with high school, being 15 and dealing with those "asses of the 90's." He told me the effect it has had on him: "I still haven't become immune. It has scarred me immensely; my self-esteem is so damn low. But things are getting better as I grow older and I rise academically and realize that I have (a lot going for me)." Adam got his first computer when he was 8 and his first modem at 12. Now



he's connected with people all over the world, and makes good use of IPhone and Vidcall. He's taking French in school and enjoys calling people in Montreal and France to practice his French.

Adam has also seen a lot of porn online. In the beginning, before it got "pretty stale" he downloaded a bunch of what he called "pretty naughty pictures" but went on to tell me quite candidly that he doesn't think any teen given the opportunity would pass it up. While Adam has enjoyed newsgroups such as alt.fan.james-bond, he's also disgusted by newsgroups like alt.binaries.teen.erotica. He laments: "I think all this stuff is a real shame. There is just too much of (it)...you simply can't escape it." Apparently it didn't occur to Adam that "escape" was as simple as un-subscribing to offensive newsgroups.

But being online with access to the net has also been a great help to Adam. When his English class had a questionand-answer scavenger hunt about Mark Twain, the class could only come up with answers to 49 of the 50 questions. That last question asked, "In Hannibal, Missouri, Twain's home town, there is a statue commemorating him there. What does the statue say on it?" The teacher said it would be impossible to find the answer. But Adam searched and found an Internet address for the public library in Hannibal, Missouri, wrote a letter to the librarian who got in her car in the rain, drove to the national park ten minutes away and copied down the inscription; Adam had his answer by late that night!

But don't get the idea that he's a "cooped up kid who lives in his computer" as he puts it. He sings in several local choruses, is involved in 3 or 4 plays a year — often with leading roles — takes piano lessons, goes to Hebrew School, does volunteer work at a local



#### Dear Phyllis;

I've heard that cyberspace is a great place to meet single women. I've put ads in several national services and got me an 800 number so I can talk to everyone. I've already gotten a response from one of my ads, too, a lady who wrote and asked me a lot of personal questions about myself. Should I answer them all? What advice can you give me?

Signed, Ready and Willing

#### Dear Ready;

Cyberspace is a great place to meet people, but if you go right to the phone and possibly in-person meetings, you're negating the advantages of communicating online; you might as well use newspaper ads. The best results in cyberspace come from cultivating friendships in e-mail and bulletin boards of common interest. You get to know a person's mind first; if you like them, the next step would probably be the phone.

The way things stand now, you could run up quite a phone bill talking to people who you may find are not what you are looking for. The woman who wrote with a list of questions doesn't sound like a promising lead, either. Anyone who starts a relationship with loads of personal questions, instead of chatting about herself and asking you about your interests, sounds like bad news to me. Imagine being introduced to her at a party, and right away, she rattles off a list of questions! The good candidates for you, I think, will be casual, friendly and not desperate. Take your time and good luck.

(Phyllis Phlegar is not a licensed counsellor, and takes no responsibility for the outcome of the situations presented to her. Love Online, the Advice Column is meant to be a guide for where to go, and what to do in the situations described. Write to advice@databahn.net and see the complete column on the WEB page at http://www.databahn.net/advice/) ◆

hospital on weekends and spends a lot of time with friends. Even so, he struggles to improve himself and his selfimage but he tells me: "The low selfesteem just lies there all the time."

I told Adam that my high school years were both tough and good for my selfesteem. I related a few of my problems at that time to him. He replied: "It was interesting hearing about your experiences in high school. It sounds very familiar. I did have a lot of trouble fitting in as well. Anyhow, it was good to hear that you felt the same way (at least for a while) the way I did and still sort of do. I have been thinking a lot about how interesting my (20th) reunion will be during the past few months. I keep thinking what the people will be like. Will the people who I hated change?"

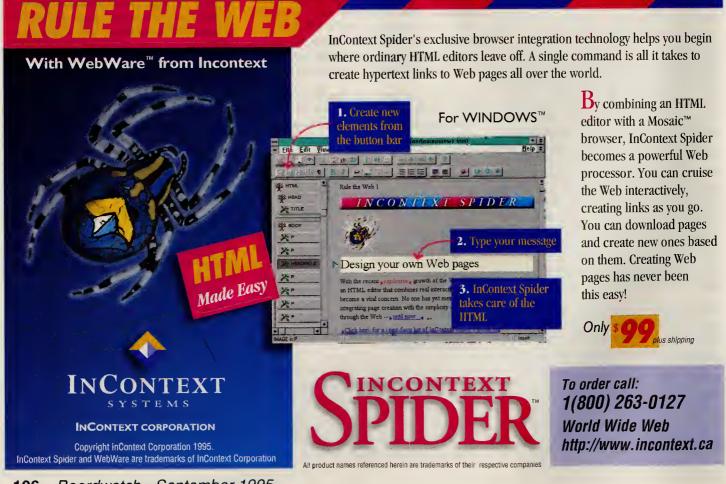
It wasn't until I began my e-mail friendship with Adam that I realized some of the "stars" in my high school had selfesteem problems; it explains the behavior of some of my former classmates who I saw at my high school's 20th reunion five years ago. Since I lived in the area at the time, I decided it would be interesting to be on the reunion committee, and that first meeting was a reunion in itself.

The only person there who had been friendly to me in high school was Kathy, but now most everyone had plenty to say. They seemed for the most part interested in explaining and sometimes apologizing for their behavior in general while we were teenagers.

Of all the kids who hammered on me, Richard had been one of the worst. He lived near me too, so I didn't even get a break from him during the summer. But at the reunion committee meeting he was obviously anxious to talk to me, and I couldn't help but notice how nicely his skin had cleared up.

Richard apparently had some selfesteem issues in high school. He explained that he had nothing against "Yankees," or African Americans for that matter, but his father did. So to please his father, he constantly berated, teased and taunted me. I couldn't stand to be around him. But this was quite a different Richard. I was touched by what he had to say and I found that I really liked him; he was charming. Last June my high school classmates held their 25th reunion but I couldn't go. I was now three thousand miles away and going into the 9th month of my pregnancy. Kathy, who I've been in touch with through the Internet, told me the reunion committee said, "Tell her we want her to come anyway!"

At my 20th high school reunion, I had no one to apologize to for any rude or ugly behavior on my part. I doubt Adam will when his high school reunion rolls around. Adam isn't buckling under and becoming an ass of the 90's and I didn't buckle under and become an ass of the 60's. Though a lot has changed in 25 years, (especially electronically) Adam is doing what I did, staying focused on what he wants now and in the future. It doesn't happen overnight, it takes a lot of work but I found it was all worth it. I think Adam will too.



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**FUEL FOR THE FIRES OF FREEDOM** 

It's time for us "mere citizens" to begin using the practical political power that has previously been the exclusive turf of professional political operators - well-funded career politicians, experienced campaign managers and big-bucks lobbyists who have used computers to promote their candidates and views for decades.

Our networked desktop thinkertoys give us the horsepower. But we need grassroots access to the fuel - the public contact databases that are essential for effective political action. We need them online, for any advocate, activist or action coordinator to access and use.

#### **MATH PREREQ**

I gave some examples and "axiomatic principles" of how personal computers can be and have already been used for effective state and federal political action, in my "How Citizens Can Pursue Practical, Potent, Net-Based, Computer-Aided, Grassroots Political Action" (April/May, 1994). If you and a few friends can swing 4,000 to 8,000 voters from one side to the opposite side in a state or federal race, you can often control an election! And the numbers are usually much smaller for most local races.

But, to attempt to swing those voters, you need to be able to locate them. You need access to the voter registration database for the target district. If the body politic is to communicate with itself, its members must be able to identify one another.

#### **PUBLIC VOTER REGISTRATIONS**

Voter registration information is a matter of public record and must be public, if only so concerned citizens can independently verify that the voter rolls are accurate. Unscrupulous incumbent politicians would love to have secret voter rolls under their control. Secret rolls would make it possible for the incumbents who control them to safely register people who are not permitted to vote, e.g., aliens, drifters who will vote for a buck and those who live outside the district, including graveyard residents ( the "graveyard vote" is well-known in corrupt elections).

Voter reg data is always available to all powerful professional political operators and they use it extensively in its computerized form. If there is to be even the most minimal empowerment of non-incumbents, then basic voter contact information must be available to all political advocates, not just to the professionals and the incumbents.

**ESSENTIAL VOTER INFORMATION** 

For legislation and elections - Voters' identification is not only crucial to election campaigns, it is also invaluable in grassroots advocacy for and against proposed legislation-in-process.

The basic value of identifying voters is to enable essential discourse among decision-making citizens about matters of public interest in a timely and cost-effective manner. This requires at least name and address data. And to reduce junkmail and useless contacts, it is crucial to know (1) which citizens are registered to vote, and (2) which registrants are likely to vote.

Name, address, party - Typically, voter registration applications are submitted to a county-level Registrar of Voters. The Registrar makes some reasonable effort to verify that they are legitimate and then computerizes at least their significant parts: name, address, date of registration and party affiliation. One's political party affiliation is needed to certify voters for primary races in those states that still require closed primaries, where only party members can vote to select the finalist for the later general election (Note - this empowers the party system and avoids real voter control over candidate selections).

The date when voters register or change address is especially valuable. Those who register or report a change of address shortly before an election are much more likely to vote, thus increasing the importance of contacting them.

Local versus state rolls - Computerization is often done on county-level data systems, although states are slowly moving towards networked state-wide voterregistration computers, usually under the control of the state's Secretary of State, who is usually the state's official archivist. One way or another, the Secretary of State will ultimately certify the final official voter roll for each state-level federal and state election, and will retain a copy of it, but local Registrars usually have much more current information.

Thus, for time-sensitive political action to be effective, it is usually better and easier to get computer copies of the voter registration lists from local Registrars, rather than from the state Secretary of State.

Voting history - In order to purge the voter rolls of obsolete registrants, to reduce election fraud and lower the huge costs of ballot-pamphlet publication and distribution, Registrars will typically record in their computerized database the recent elections in which the registrant actually voted. After missing a certain number of general elections, Registrars will typically send

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Warren received the Hugh M. Hefner First-Amendment Award from the Playboy Foundation (1994), and the James Madison Freedom-of-Information Award from the Society of Professional Journalists-Northern California (1994) for his efforts to open online access to government. He received the Electronic Frontier Foundation's Pioneer Award in 1992; founded InfoWorld and the Computers. Freedom & Privacy conferences (1991); was founding host of PBS television's "Computer Chronicles" (1981) and founding Editor of Dr. Dobb's Journal of Computing (1976).

re-verification cards to those who have not voted for several years, and if there is no response, will finally purge them from the registration rolls.

Of course, in order to identify likely voters, it is invaluable to know which registrants have a pattern of regular voting, or at least voted in recent elections.

Irritated aside: Purging rolls of inactive and unresponding voters has been made more difficult by last year's Motor Voter Registration Act (MVRA) which incidentally prohibits collecting needed ancillary identifying information, and also requires that registrants be retained on the rolls for several years, even if re-verification cards are sent without response, and even if the post office returns a Registrar's mailing with a "no longer at this address" or a "moved to new address" that is outside the district. Registrants are the only ones who can report changes of address to the Registrar of Voters, and they rarely report their departure. Budget-strapped Registrars are howling at the waste and stupidity, but no one in Washington seems to be paying attention. That indifference is particularly curious, since the Republicans were virulently opposed to the Democrat-sponsored MVRA. Our congress-critters in "action!"

Other voter data - Some states also collect and computerize other information, e.g., sex, age, maiden name, occupation, social security number, etc. This data helps in identifying and avoiding duplicate registrations.

As a matter of personal privacy, this ancillary information is often not available to members of the public, although professional political operators zealously seek to obtain it, and it sometimes seems to magically fall into the hands of insiders' campaign operations.

# PROFITEERING DEMOCRACY

Basic voter registration information is always available from government sources in machine-readable form for legitimate politician and campaign uses. Reputable Registrars who want to encourage participation in the political process charge no more than what it actually costs them to create a requested computer copy of their files.

Unfortunately, some voter reg agencies disregard the need of the body politic to communicate with itself, and limit modern [computerized] access only to those well-funded political operators who can afford to pay the cost of copying plus an additional profit to the agency. Like jus-

tice in the court system, equal access to the political process is only for those who can afford it.

# THE PRIVACY ISSUE

Unthinking voters increasingly are demanding that public access to basic voter registration data be tightly restricted, primarily because they are fed up with receiving the junk-mailed, content-free political platitudes and pretty pictures with which professional campaigns saturate their mailboxes before an election. Voters might feel differently if they were receiving substantive information and commentary from non-professionals — concerned fellow citizens seeking useful political discourse.

Incumbent politicians (whose campaign managers have established channels for accessing that crucial voter data) have been only too willing to oblige naive privacy pleas that help destroy the ability of non-professionals to communicate with voters. Incumbents, knowing that they have better access to the media as well as established access to voter and constituent addresses, have often piously pontificated about protecting citizens' privacy. They have passed laws that choke access to voter files and prohibit their copying to others, although every professional campaign feeds numerous copies of voter databases to their political supporters, campaign workers and precinct walkers.

Other incumbents have pointed out that stalkers might use the voter reg records to track down their victims. This trick has been used by perhaps a dozen or so stalkers out of the nation's 270 million citizens.

More legitimately, there have been complaints that the voter registration files have been used for purposes unrelated to the political process — law enforcement agents trying to track down parking-ticket violators, spouses trying to serve papers on their disappearing child-support sources, civil and criminal process servers acting under court orders, bill collectors and totally-unrelated direct-mail business solicitors (who can more easily and more reliably use any number of better mailing lists).

Delightfully, there are some cases in which direct-mail business solicitors have actually been prosecuted for exploiting the public's essential access to voter reg files for entirely unrelated business hustles.

The general privacy principle is that, "Personal information collected for one

purpose shall not be used for another purpose without the prior permission of the individual." It should be honored; citizens register to vote in order to participate in the political process.

Those citizens who wish to exercise the most powerful force in our society — the power of the vote — must risk some slight loss of privacy as they seek, through the ballot, to impose their will upon others. Those who would control society have some obligation to permit its members to identify them and seek to communicate with them about the impact of their votes.

# **AVAILABILITY ONLINE**

It is ridiculous for each individual activist and each isolated grassroots organization to have to separately obtain, pay for and process copies of voter files. It's time for these already-computerized files to be made available in modern form — online, up to date and without cost.

# **EMPOWER THE NET!**

ACT now!

- (1) Copy this article, along with your cover letter advocating prompt action, to your own Registrar of Voters and state legislators.
- (2) Until your area's government modernizes itself, obtain a computer copy of your own area's voter registrations and make them available online (controlling access and keeping access records similar to those used by the Registrar) as your contribution to empowering grassroots citizen activism. Let us stand on one another's shoulders, rather than each others' toes.

As you and others make voter reg files available online, and/or develop freeware to assist in their use (suggestions in future columns), send details by e-mail, and I will help you publicize their availability.

There are only two alternatives:

We can continue the present situation, where only well-funded, established political royalty can conduct substantive communications with us, their powerless subjects.

Or else we, the members of the body politic, can be empowered to communicate with our community's ultimate decision-makers — ourselves! It's time to do it. •



by Rea Andrew Redd

# **EDUCATOR'S INTERNET COMPANION**

Educator's Internet Companion:
to Educational Resources on the Internet, by
the Staff of Classroom Connect (Gregory
Giagnocavo, Tim McLain, Vince DiStefano,
Chris Noonan Sturm), Wentworth Worldwide
Media, Lancaster, PA, 1995, 271 pp., appendices,
glossary, index.

I'll tell you a secret: librarians will pick up a new book and read the index in the back first. We do this because a table of contents can obscure the best of a good book and hide the shortcomings of a bad book. Very rarely will a good book have a poor index. Also, I'll also admit that I scoff at any nonfiction book title that has the word "complete" in it.

The good news is that *Educator's Internet Companion* (EIC) has over 200 main entries in the index, with over 100 of the entries having secondary and even tertiary entries. The glossary has about 70 words defined; the writers realize that teachers need definitions which are easily transferred to the classroom and don't have to be rewritten: The four appendices helpfully organize material and can be used as lessons; they are not trivia used to fatten the book.

Now, more to the point: is this book worth the \$40 retail price? If you place a value on a book by the number of pages you get for the price, then EIC is moderately expensive and there are better values out there. But, if you place a value on a book by the quality of the material and the readability of it, then at the retail price EIC is a good buy. There is no padding or fluff in this book; even the 21 pages of mailing lists, the 38 pages of Internet sites and 14 pages of USENET newsgroups are organized by academic discipline. The lists are not inflated by the kitchensink.org bulletin boards found in other Internet guides.

With about 70 pages devoted to lists of gopher, telnet, anonymous ftp sites and mailings, and with about 60 pages for the index, glossary and appendices, what's in the other 140 pages?

Much to an educator's satisfaction, there are about 65 pages of lesson plans. The authors say, "The Internet is a timely tool for educators who are reforming education. If we believe information is the bedrock of knowledge, understanding and power, then universal access to worldwide databases, up-to-the-minute global information and people-to-people networking is crucial to providing students with educational challenges. Using the Internet, we can teach students to search, retrieve, collect, and exchange information. More importantly, they will learn to analyze, write

about, and then publish information on any imaginable topic. This cycle of information gathering, analyzing, writing, and publishing is important in the new information age already upon us."

Reading over the lesson plans, I found them to be age-appropriate, with reasonable objectives and adequate procedures. What you will have to add is the motivating question/illustration at the beginning of the lesson, and probably fine-tune the evaluation methods by which the students tell you what they now know and how they learned it. Otherwise, any of these lesson plans appear to be transferrable to actual classrooms.

From American history (four plans, including one on women's history) and astronomy (only one plan) through U. S. government (two plans) and writing (three plans covering autobiography, fiction, research), these 30 plans at best can only give you a good model in designing your own and an adequate sample to try out on the students. Are there any Future Teachers of America Clubs out there? Could a future teacher construct an Internet-based lesson plan from these samples and help a teacher teach this student-constructed plan? Maybe even have a senior high student teach an elementary class? I would think any teacher would look good in front of a principal or school board if he/she described how the Internet connection had been used in this way.

And the rest of the book? Oh, about 35 pages of virtual tours of rich Internet sites for educators include ERIC, NYSERNet, Scholastic (each by gopher), CARL (by telnet), Oakland University (by ftp), the Froggy Page, FedWorld, and the AskEric Virtual Library (on the WWW). And 25 pages of World Wide Web (WWW) sites that gather fifty snapshots of such educational necessities as Academy One, Britannica Online, Classroom Connect, Exploratorium, Grolier's Encyclopedia, Mercury Project, Princeton Review for SAT, GRE, et al. preparation, Thomas WEB for the U. S. Congress and 42 others.

Last but certainly not least, there are 15 pages about finding sources of funding. This is not an extensive how-to section but a point-the-way description of school-business partnerships, grassroots funding, grants and awards, corporate and government sources of funding and foundations, and a bibliography of resources and reference materials of how-to sources.

Then come those appendices. Does anyone ever read those? You will in this book. One appendix defines the Internet from an educational perspective and is a good source for reinforcing your case before adminis-

Rea Andrew Redd lives and works in southwestern Pennsylvania where he manages a high school library, teaches European history and Scholastic Achievement Test preparation. On occasion, he reenacts American Civil War battles with the Ninth Pennsylvania Reserves, an historic, military impression unit. E-mail Rea at: redd@genesis .duq.edu trators. The second appendix is a tutorial on Internet navigation tools, e-mail, net manners, etc. The third appendix is a very important discussion of acceptable use policies which cover your professional butt as the "student geniuses" try to find porn on the Net while they are in your classroom. The fourth appendix evaluates commercial online services and their appropriateness for educators and their students.

With the book comes a twenty minute video cassette. The first five minutes are a presentation of Wentworth World Wide Media's other products and the remaining 15 minutes are a National Aeronautics and Space Administration produced program. Basic questions such as

- "What is the Internet?"
- "Is the Internet valuable?"
- "Does the Internet having anything to do with education?"
- "How is the Internet being used in classrooms today?"

It's a handy item to introduce the 'Net to other teachers, parents, administrators, and school boards. Its content is basic and to the point.

Also, a MAC and a WINDOWS disk are included with the book. Entitled "Educator's Internet Companion, K-12 Resources," these disks are a preview of what is available on Quest, the WWW and Gopher server of the NASA K-12 Internet Initiative. In addition to housing a great many documents and teachers' guides, Quest is also the online home of the projects "Live From... Antarctica" and "The Women of NASA." On this disk is a compilation of subject-specific projects, K-12 Internet and New 'Net Users questions and answers, a detailed description of "Live From... Antarctica," plus WWW browser forms.

So, what's the bottom line? Is it worth \$40? Without a doubt; if you can buy just one book, make it the *Educator's Internet Companion*. Oh! No, I didn't forget. Is the EIC appropriately titled the COMPLETE Guide to Educational Resources on the Internet? No, of course not — is anything in this world complete? When you buy your copy of the EIC, use a pen to cross out the word COMPLETE and write in the word ESSENTIAL.

# THELING UPDATE: TECHNOLOGY COORDINATORS ORGANIZE

Promising to make available the experience and expertise of America's top technology coordinators and to give

access to volume discount buying power, Quality Computers, Inc., of St. Clair Shores, Michigan, is sending out membership invitations for the *National Technology Coordinators Network* (NTCN). The mission statement of this organization includes the primary concerns of informing, coordinating and supporting tech coordinators in achieving their school's technology goals as well as giving individual purchase orders the attention and savings of a consortium.

Membership in the NTCN includes software that makes available a limited access account on LINQ (theLINQ), Quality Computers' custom Internet access system for education (see the Education Link in the May, 1995 Boardwatch); the software allows the user two hours of online time per month. This online account is NTCN members' tool for communication with thousands of fellow technology educators. Last spring e-mail, an online pricequote system, Internet access, and a file library became available to the membership. This autumn, an online catalog of educational software and peripherals will be available; with the catalog you will be able to read the comments of members who have used the software and peripherals and get correlated classroom activities.

TheLINQ is an information server tailored to the needs of schools. It delivers a filtered Internet, one with educational content in an organized, user-friendly format. It also provides e-mail and an unfiltered Internet option for educators. Unlike most online services, theLINQ doesn't require individual dial-up accounts for individual users. System startups with 200 user I.D.s are being offered for under \$1.000. A no cost demonstration compact disc of the LINQ is available during September and October; call Quality Computers, the distributor, for a copy. To sign up for a free NTCN membership or theLINQ demonstration CD-ROM, contact Quality Computers by phone (800)777-3642 or by fat mail 20200 Nine Mile Road, St. Clair Shores, MI 48080, or by e-mail://ntcn@qualitycomp.com

# **'NETPALS FOR TEACHERS**

The International E-mail Classroom Connections (IECC) mailing list is a good place for teachers to look for penpals who are also teachers. This list focuses upon international and intercultural teachers. E-mail partnerships are sorted by elementary and secondary school levels. Send e-mail to ieccrequest@stolaf.edu, type subscribe

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# **DOWNLOADER'S GUIDE**

Prentice Hall released this summer a how-to-book for file retrieval of free documents from the Internet, America Online, Prodigy, and other commercial gateways. Look for The Downloader's Companion for Windows in your favorite bookstores. If you drool on the book, be prepared to shell out \$20; try not to salivate on the disk that is included. If you are impatient call Prentice Hall, Inc. at (800)947-7700 or send e-mail://orders@prenhall.com

# AND WHAT ELSE IS NEW? BROUTERS!

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CORRECTION: the URL for the Holocaust Archives reported in the June, 1995 Education Link was incorrect. The correct URL is gopher://jerusalem1.datasrv.co.il (that's a digit 1 after "jerusalem"). ◆

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# BEGINNER'S LUCK by Doug Shaker

# DO I LOOK LIKE I KNOW WHAT I'M DOING?

y BBS, Mothra, is some kind of cranky adolescent now; I can't decide if I love it or hate it. Sometimes I feel proud of myself for building it and sometimes I want to slap its impudent face and tell it I am sorry I ever started it. It takes so much time and it just won't do what I ask, no matter how hard I try.

If you have been following this column, you have watched as I have gotten all wild and enthusiastic about building a BBS, as I fumbled around selecting the software to run, and then as I got it and my Internet connection up and running. Now the BBS is more or less running.

It isn't finished, of course. When is a BBS finished? Can a BBS be finished? I don't think so. I don't even have half of the projects done that I wanted to do when I started Mothra. FTP mirroring, Internet mailing list archiving in a forum, FTP access, personal web pages for users — all those things have yet to

Even if I had all those things done, what users want and need will keep changing, I am sure. Would your users have wanted an Internet connection and a personal web page two years ago?

Even so, it is running. By some measures, I have a reasonably successful little BBS. I get about 20 calls a day. I have two incoming phone lines and sometimes I even have callers on both lines. My user base is a little more than 350 users right now, but 75% of those could be axed - they called once and never called back.

Some parts of the BBS are working pretty well now. My target audience is Smalltalk developers (Smalltalk is an object-oriented computer language), so I try to create BBS features that would be useful to them. I carry USENET newsgroups that relate to object technology. I archive Smalltalk job postings from Compuserve and USENET. I have file libraries of freeware Smalltalks. I have file libraries of patches and demos for some of the major Smalltalk developer utilities. All of these features get used with some frequency, so I really do have an electronic resource that seems to be of some value to my target population.

I still have a mild sense of dissatisfaction or failure about Mothra, though. I had envisioned it as a meeting place for the high and mighty in the Smalltalk world, a place where weighty technical discussions occurred on a daily basis, a place where people needed to check in to know what was really happening in the Smalltalk world. That certainly hasn't happened. I don't seem to be able to get a live discussion forum going to save my life.

Something else interesting has happened, though. Because I write this column for Boardwatch, I get BBS visits and e-mail from readers. About half the people who logon leave me some sort of e-mail. And about a quarter of those leave e-mail asking me some sort of technical or strategic question about their BBSs!

"I'm not exactly sure why people ask me [BBS] questions. My very incompetence for the task [of starting a BBS] is what makes it possible for me to get the job [writing about it]."

I'm not exactly sure why people ask me these questions. After all, I'm writing a column about starting a BBS for the first time. To do it honestly, I have to be an ignoramus about BBS technology and then talk about what it is like to attempt to implement a BBS in spite of that ignorance. Believe me, I am fully qualified in this regard - six months ago, I knew absolutely nothing about running a BBS. However, that same ignorance, publicly displayed, appears to make me approachable. In some sense, my very incompetence for the task is what makes it possible for me to get the job. Kind of like politics, I guess.

These letters and discussions about BBS technology are a bonus I didn't expect when I started the BBS. They constitute a lively discussion, a form of chat, that I had expected from my Smalltalk customers but haven't achieved. I guess another one of my sysop lessons that life is teaching me is, "Go with the flow. Take the opportunities that are offered you. Don't fight caller demand."

Some of the letters I get are from teenagers wanting to start up or improve a BBS. Here is a fairly typical e-mail from a 16 year-old living on the East coast, who I will call Voltaire:

"The problem is that I have no idea where to get users. My friend and I posted in the newsgroup alt.bbs.ads and [we did] not [get] much response from that. I also use other BBSs to advertise. Is it how I post the message or the frequency of it? ... Anyway the basic theme is a PD/shareware board with some interest conferences such as Pink Floyd. What do you suggest I do to get the word out?"

Doug Shaker runs a one-person mailorder business supplying Smalltalk software to Smalltalk developers. He started his BBS in early 1995 as an adjunct to his business. He wishes he knew what he was doing, but he sees no chance of that happening anytime soon. You can send Doug e-mail at doug@smalltalk. com or you can connect to his BBS at (415)854-5581. You may also telnet to his BBS at bbs.smalltalk .com. Doug has five modems, four computers, three phones, two children and one wife. They keep him busy.

I can't really answer his main question, how to publicize his BBS. I am still incompetent at that. However, I think his problem is elsewhere. Is his BBS worth calling yet?

My own feeling is that general-purpose shareware-oriented BBSs aren't worth the effort. Exec-PC and CompuServe already carry tens, maybe hundreds or thousands of gigabytes of shareware and freeware. Without a really big budget or some well-defined specialty, how can Voltaire possibly expect to compete with them? If Voltaire has (as is typical for a high school sysop) a PC, one modem and \$250, he's stuck. Voltaire will have to spend most of that money to get some BBS software and to install a dedicated phone line for the BBS. When he starts making calls out to collect his shareware, he is going to run up either long-distance phone bills or Compuserve bills. The next month, he'll get a large bill that he can't pay, and that will be the end of the BBS.

Voltaire is also ignoring one of his most important assets - his own interests and abilities. He also hasn't thought about his market - the people he wants to call his BBS. There is a clue in his message as to what might be a good theme for his BBS. My guess is that he and his friends are mightily interested in rock & roll. I know I was, back in the Paleozoic, when I was a teenager. If they aren't, how else can I explain his inclusion of a Pink Floyd conference on a shareware-oriented BBS? If the audience for this BBS is intended to be Voltaire's classmates, then he should focus on items of interest to them - concert dates at the local amphitheaters, gigs for the local bands, schedules for the high school football team, the advantages and disadvantages of the different Spanish teachers, ways of getting out of gym class, reviews of the latest CDs, etc.

Anyway, I tried to say all this to Voltaire. I think he agreed with me. In the end, he said,

"Thanks for the help. Actually, today I decided to go towards a specialty [board]... I figure along with some interesting music conferences, I would make it an entertainment [BBS] — games, some worthwhile shareware, and a good place for people that are new to the BBS world."

Now, that sounds like a lot more interesting place to visit than what he started out with.

I also get some mail from experienced sysops who are trying to connect to the Internet. Here is an example from someone I'll call Leonardo:

"OK, a couple of questions, please. What card are you using? I mean the card you need to hook up to a router. What router are you using and where did you get it? Or are you using a dialup 28.8 modem and a slip account? I really want to go to a 56k line but I don't know where to get the card and router. I figure you would know."

Leonardo runs a PCBoard system under OS/2. He wasn't quite sure what does what in an Internet connection. Your BBS can connect to the Internet in either one of two ways. The first alternative is to connect a single machine at your site over a modem (or the equivalent) to your Internet Service Provider. The modem connection is called a SLIP (or PPP) connection. If you use this alternative, only that single machine is on the Internet and no routers are required. The second alternative is to connect the modem to a router and to connect the router to your local Ethernet LAN. If you do this, then all of the machines on your LAN are connected to the Internet and you need a router.

In general, the function of a router is to link together two (or more) different kinds of networking technology and pass packets (bundles of information) back and forth between the networks on either side. If a router passes all of the packets back and forth, it is called a bridge. If it filters packets, either for efficiency reasons or for security reasons, it is a router. Most routers are used in large corporations where it would be inefficient (or impossible) to put everyone on the same LAN. These routers usually have an Ethernet connection on either side.

Here, however, we are concerned with routers made with an Ethernet connection on one side and a serial line interface connection on the other side. Serial line interfaces are used to connect a SLIP (or PPP) connection to a local Ethernet. Here is how the wiring goes:

The phone line for your SLIP connection connects into your modem.

The serial line from the modem connects to your router.

The Ethernet connection on the router connects to your local Ethernet.

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Your local Ethernet cabling connects to the Ethernet card on your machine or machines.

When the cabling is all done, you have to program the router to restrict the traffic across the router. You have to restrict traffic across the router if you want to protect the machines on your local Ethernet. If you don't, some stranger out in netland can reach in and harm them. For example, I have four computers in my house. Two of them run Windows for Workgroups so that we can share files across the net. If I connected my Ethernet to my SLIP connection without any filtering in the router, every machine on the Internet would have the same access to my machine as does my wife's machine. Everyone of the millions of new Internauts could mount one of my disks as drive E on their system and do a **DEL** \*.\* to my database directory. To say the least, I don't want to grant them that privilege. I would have to program the router to have it filter out NETBUI packets, the packets used by Windows for Workgroups for file sharing. Then that type of packet would not be able to cross the router and my net would be safe from that particular kind of trouble.

Another way to avoid security problems is to keep your BBS off of your local LAN. I just run the SLIP connection directly into my BBS system - that is, the phone line is connected to the modem and the modem is connected to a serial card on my BBS. There is no router in the loop. This means that my personal machines are not on the Internet and that my BBS system is on the Internet but not on my LAN. It also means that I need to use floppies to transfer data from my personal machines to my BBS machine. But the benefit is that I don't have to worry about anyone getting at my files.

I ended up explaining all this to Leonardo, then telling Leonardo that he really didn't need to use a router if he was just putting one machine on the Internet.

In writing this column, I have done some thinking about the nature of my BBS. Until today, I didn't really know what to make of all the BBS-related email messages and conversations on my BBS. Since it wasn't Smalltalk-related, I had thought of it as some kind of meaningless distraction from the Smalltalk thrust of my BBS. Now I think it is the liveliest part of my BBS. The BBS continues to evolve and I am trying to keep up.







L concerning voice-over-Internet applications on different platforms. I thought I'd contribute something to the genre with this report on Electric Magic's NetPhone for Macintosh.

I made my SLIP connection with Netcom, fired up Netscape and logged onto Electric Magic's http://www.emagic.com web page. I poked around a bit and finally clicked on "download demo." After an eight-minute download, oops there it was. Now nor-

mally, I would approach any introductory evaluation from the standpoint of "this could take days to figure out; better schedule half the weekend for it." But deadlines being what they are, I surprised even myself by immediately pressing on. My Netcom connection still hadn't been dropped, so heck, go for it.

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I opened the NetPhone folder, scanned the requisite **Read.Me** file and double-clicked on the application icon. A sound meter window popped open, as did a window that manages the outbound signal. I pulled down the address menu and selected netpub.emagic.com which quickly displayed a listing of addresses. I selected one and another window appeared that obviously represented the remote connection.

Then I heard the gravelly voice of Bill K., living in Jim Thorpe, Pennsylvania. In less than 20 minutes from logging onto the net to download some software, I was vocally yakking on the Internet via my local connection. Have a conversation between Los Angeles and Sweden? No problem. It was that simple. It was that easy. It worked far better than any liberal arts major had a right to hope for without reading the documentation and putzing with it for hours. This, after the horror stories I've heard where multiple frustrations abound in the hunt for sound cards and a myriad of other needed tweaks to get voice-over-net products to maybe work on the DOS side.

What we're talking about is the new release of NetPhone, version 1.2.1. With NetPhone, all you need is a Mac, microphone, MacTCP and a reliable Internet connection. What you get is a hot flash when you realize you can pretty much forget AT&T long distance charges. (BTW, you can also use NetPhone over any AppleTalk LAN).

According to the company, new features in this upgrade include:

by Bill Gram-Reefer

Worldwide NetPubs: When you connect to a NetPub (think of a netpub as a local tavern - not a publication), you see a list of everyone connected to that NetPub, and they all see your active address. As each NetPub is frequented by different groups of people, each has a different "atmosphere," just like in the real world. But, with NetPhone you can visit several pubs at the same time. Electric Magic maintains a list of all Public NetPubs.

> High quality, full duplex audio: Net-Phone 1.2 will run on any Macintosh from a Mac IIsi to the fastest Power Mac. To support the slowest machines, NetPhone includes a custom low-overhead audio codec. But if you've got a IIci or faster you can use GSM

audio, the same format used for digital cellular phone calls in Europe. Net-Phone is the first audio conferencing application for any PC that actually lets you speak and listen at the same time, just like the telephone, and does so over a modem-based connection.

Caller ID: Net-Phone tells you the name of the person calling, their IP address and their host name.

Multiple Active Calls: NetPhone lets you have multiple call windows open at once, so when someone calls and you're already speaking to someone else, no call waiting!

WWW Integration: The WWW browser NetScape can be configured to pass URLs to other applications. According to Electric Magic, NetPhone lets you configure NetScape to interoperate with NetPhone, allowing you to make NetPhone calls, or connect to NetPubs by clicking a link.

Address Book: Saves commonly used calls as Macintosh documents in a menu.

Works with CU-SeeMe and vat: NetPhone fully supports the vat protocol, letting you talk to CU-SeeMe users, CU-SeeMe reflectors and UNIX workstations.

NetPhone Alert: NetPhone Alert is a small background-only application that you can run all the time. It listens for incoming calls, and lets you know when they arrive. Only if you want to answer the call do you need to run the main application.

Bill Gram-Reefer has been writing about Macintosh computers since 1984. A native of Pittsburgh, Pennsylvania, but now based in Concord, California, Bill is president of WORLDVIEW, specializing in networking and communications. He also writes the Online Services column that appears monthly in Micro-Times. Bill manages a Web page reachable at http://world view-bbs.com which provides a link to free Windows or Macintosh TeleFinder client software for his WORLDVIEW BBS WORLDVIEW BBS can be accessed also via telnet: //worldviewbbs.com (Port 1474) or by dial-up at (510)676-2919. You can also e-mail

Bill at reefer@

netcom.com

In my haste, I neglected to run the included AppleScript that makes NetScape NetPhone-aware. I also found out later that those pop-up windows let you select the best settings for your machine and IP connection. This promised a marked improvement for subsequent calls, since during my brief chats with Bill K. he said quite clearly to me that my signal was breaking. Well, his signal was fine so obviously he had gotten it right; one can improve performance by reading the manual.

Several caveats. There are three factors that affect NetPhone's performance: modem and connection speed, CPU horsepower, and the quality of your IP connection. I only have a 14.4 Kbps pipeline to Netcom, even though my Supra 288 can handle more. Next, a Mac IIsi isn't going to do you right compared to a PowerPC. And finally, your IP connection should not be overloaded.

Single user registration codes cost \$59. You can also purchase two registration codes for \$99 so you can give one to Mom. Shrink-wrapped versions with software, hard-copy manual, etc., run \$65 and \$125 respectively, plus shipping and handling. Electric Magic Company; 209 Downey Street, San Francisco, CA 94117; (415) 759-4100 voice; (800) 987-2001 toll-free order line; http://www.emagic.com WWW.

# MAC BBS SOFTWARE UPDATES

Meanwhile, the major Mac BBS developers announced new offerings. SoftArc, Inc., is busily working on a soon to be released Windows NT version of its *FirstClass* server. On the Mac side, SoftArc is working on a totally PowerPC native version of FirstClass that the company says will drastically improve the performance of some of the intensive CPU activities.

Additionally, SoftArc has released its FirstClass Fax Gateway 2.0 for Macintosh. The gateway enables FirstClass users to fax messages, text, or graphics files anywhere in the world by simply addressing messages to fax destinations. One of the neat things you can do is log onto your Internet account from your home in Los Angeles, then log onto a FirstClass system in Sweden and have a message sent to a local number from that server. You should be able to do this via a dialup set as well where the fax message could be routed from one FC system to another before the actual fax transmission. Based on STF's STartFaxing software, the new version of the gateway includes gray scale faxing capabilities, a newly designed status display, improved

reporting and enhanced multi-hop name resolution. FirstClass Fax Gateway 2.0 is designed to run on a dedicated Macintosh computer (4Mb-RAM) with its own fax modem and telephone line. Pricing is set at \$495 and can be ordered by calling (800)364-1923.

ResNova's NovaLink Professional 4.0 will be well worth the wait since this previously announced revision adds a totally redesigned product that is based on HTML (hypertext markup language). This means that the NovaLink Pro is mutating towards more of an Information Server rather than just a "pure" BBS. Two advantages. One, users are able to use the server's IP connection to surf web pages using the NovaTerm client software over a plain dial-up connection. They do not need their own SLIP or PPP connection. Secondly, with HTML as the interface foundation, administrators are able to integrate web URLs (uniform resource locator) within conference or file areas. Thus a remote user can click on those references and connect to some other remote server from within the BBS using the client software. Conversely, since each of those common BBS areas like message bases, file folders and so forth have their own URLs, users should be able to access a NovaLink Pro BBS in Los Angeles from a hot link on a web page based in Sweden, in this case using a web browser.

On the *TeleFinder* front, Spider Island Software has released version 4.0. Here's a look at some new features:

TeleFinder's Node Server is now a multitasking, threaded server that can support multiple connections and users from a single application. This cuts down on overhead and users report dramatic speed increases.

Spider Island has also added support for SMTP mail across the Internet supporting both ESMTP and MIME conversion. This new mail gateway is threaded also, supporting multiple mail sessions. Multiple files can be attached to mail and conference messages.

Spider has also added background file transfers supporting simultaneous upload and download. TeleFinder's native transport layer files are now transferred in the background allowing a user to continue to browse, chat, read messages or conferences or send mail. Meanwhile entire folders of graphics files can be displayed in "thumbnail" format utilizing Adobe PhotoShop and Iron Mike preview resources for high-speed display of picture previews.

Interestingly, TeleFinder 4.0 adds a Finger server, as well. Finger is an Internet protocol that helps people find the users of your BBS. Using Finger, now built into the TeleFinder client software, you can display a list of users connected to the BBS and verify e-mail addresses.

Finally, as if in direct response to this column's plaintive missive concerning the need for Apple to unbundle all of the cool software from its pricey Internet Servers, StarNine software has come up with a special CD that is a perfect solution. *MacWebsters, the WebStar CD ROM* contains everything you need to create a complete www site on any Macintosh including:

- WebStar (formerly MacHTTP)
- FTPd, evaluation copy of StarNine's ListStar
- HTML Editor 1.0 and BBEdit for creating HTML content
- MacWeb (a browser)
- Adobe Acrobat Reader
- AppleScript
- UserLand's Frontier for creating CGIs between WebStar and external applications like FileMaker, clickable Map CGIs for creating navigable image maps and demo AppleScripts and CGIs.

Finally, you get WebMaster Macintosh, an online edition of Levitus and Evans' reference work for Macintosh web page developers provided in Adobe Acrobat format. So now your Auntie in Sweden can finally log on and see your web page in Los Angeles. Starnine Technologies Inc., 2550 Ninth Street, Suite 112. Berkeley CA 94710. Voice: (510) 649-4949; FAX: (510)548-0393; http://www.starnine.com



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# The Professional BBS Service Bureau

Bulletin Board Systems (BBS) are fast becoming a vital tool for information exchange in corporations, associations, government and other professional organizations. Yet the learning curve and related costs for an in-house installation are steep. Not to mention the staffing required for continuous user support.

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Mark Burnett at APDI's BBS Service Bureau

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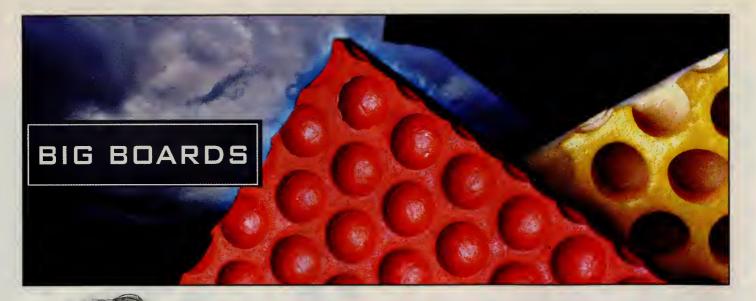


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by Wallace Wang

THE HUNT IS ON!

In case you've been living under the Pacific Ocean in a nuclear submarine for the past six months, you already know that the World Wide Web is taking the online industry by storm. Whether you know a little, a lot, or absolutely nothing at all about the Web, you can take advantage of your knowledge by entering CompuServe's Internet Hunt contest.

Just use your favorite Web browser to visit http://www.compuserve.com - the CompuServe home page. If you don't have a Web browser (shame on you) download CompuServe's NetLauncher for Windows (GO NETLAUNCHER) or call Spry Mosaic at (800)823-6505 ext. 100 and ask for their free Web browser on a floppy disk.

Once you have a Web browser, here's how to play the Internet Hunt. Each week, the CompuServe home page provides five clues that you can find by jumping to different web sites run by the many contest sponsors. Each clue will be related to the sponsor's specific products, which means you don't have to be an Internet or World Wide Web wizard to answer any of them (although you do have to know a little about each sponsor's products).

At the end of the week, CompuServe will randomly pick several people who successfully answered all five clues correctly. These weekly winners will win everything from magazine subscriptions and software to cold, hard cash, depending on the week and the generosity of the Internet Hunt contest sponsors. CompuServe claims the total value of its prizes will be approximately \$1 million (which means that taxes will effectively decimate that prize value to about half).

At the end of the contest on October 27, CompuServe will randomly pick four people who won during the weekly drawings. These four lucky winners will get a free trip to Las Vegas so they can attend COMDEX, the largest convention in the world that doesn't gamble at the casinos. (Half the value of this prize is that you won't have to waste time hunting for a reasonably priced hotel room either.)

Once at COMDEX, these four winners will participate in the all-out, grand-finale Internet Shootout. They'll be pitted against one another to answer questions for the entertainment of the roving COMDEX masses armed in business suits, briefcases, and tennis shoes. The winner of this Internet Shootout will win the final grand prize, which will be a fancy sports car that any casino will be happy to hold as collateral for any gambling debts they may later incur.



So if you think you have what it takes to answer questions that may have nothing to do with the Internet, then join the Million Dollar Internet Hunt before it ends on October 27. Who knows? For your help in publicizing the World Wide Web and

Wallace Wang is the author of CompuServe for Dummies, Procomm Plus for Dummies and Visual Basic for Dummies (all published by IDG Books). He also does stand-up comedy in the San Diego area, and has appeared on A&E's Evening at the Improv TV comedy club. He can be reached via e-mail://70334 .3671@compu

serve.com.

CompuServe, you may wind up with a free trip to Las Vegas, a free sports car, and more than fifteen minutes of fame for the evening.

Just remember that to play the Internet Hunt, you must be a resident of Canada or the United States. (If you aren't a Canadian or American citizen, now's the time to defect.) In addition, to make it fair for adults, you must be at least 21 years old so you can legally drive away in case you win the sports car in the Internet Shootout. Good luck and good hunting.

# **AVIATION LEAK ONLINE**

Better known during the Cold War as Aviation Leak, in reference to its many articles describing information that most American military sources thought nobody would ever find out, Aviation Week magazine has joined CompuServe with their own online magazine and forum (GO AWG).

You can browse through the latest articles, write a letter to the editor, or download pictures from the latest edition. Unfortunately, the online edition lacks all those hilarious military hardware advertisements, hawking export versions of highexplosive missiles to Third World countries that can't afford to feed their people, but can afford to kill them. ("Get the new cruise missile from General Dynamics. They're worth bankrupt-

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While reading magazine articles online can be fun, it can be a lot more exciting to swap stories and chat with other Aviation Week enthusiasts. To provide such an outlet, visit the Aviation Week forum (GO AWGFORUM). Here you can network with other aviation

professionals to find a better job, find the nearest aviationtraining center and learn the latest advances in space technology.

Aviation Week tracks the latest aviation developments, usually focusing on military uses since only national governments can

afford the latest gee-whiz technology to put supersonic aircraft in the sky. For those whose interests relate more to military history, check out the Military Multimedia forum (GO MILGRAPHICS).

Although its name suggests that you'll be able to find plenty of digitized photographs, full-motion video, and sound clips of a MIG-25 or M-1 battle tank, the Military Multimedia forum also serves as a place to learn, discuss, and debate about current and historical topics such as the American Civil War, Bosnia, and World War II. Naturally, the heart of the Military Multimedia forum lies in its multimedia files.

For example, you can find a huge library of World War II aircraft images (to educate those youngsters who think Hitler started the Vietnam War) as well as a complete tour of the U.S. Air Force Museum, the oldest and largest military aviation museum in the world. This tour includes the images and complete specifications on aircraft ranging from the Wright Brothers' first airplane to the design of the American Space Shuttle. For a video overview of the museum, download the USAF.ZIP file (901,346 bytes).

If you have a question related to military history, or just want to know more about the military, drop a line to the sysops, Dan Meeks and Duane Goodridge. Both are Vietnam veterans from the U.S. Air Force (Dan Meeks) and the U.S. Marine Corps (Duane Goodridge). If you're a military veteran, a military history enthusiast, or someone considering a career in the military, either sysop will be happy to assist you in any way they can, from unearthing GIF images of obscure aircraft like the B-32 bomber (the rival to the B-29, which the United States designed for bombing Europe across the Atlantic Ocean in case England fell to the Germans in World War II) to helping veterans locate their old military buddies through the wonderful network of CompuServe.

In reference to the Military Multimedia forum, Dan Meeks says, "We're fairly new, but our goal is to provide graphics and multimedia material to all areas related to the military." Dan is particularly proud of the graphics library con-

taining military medals and decorations from different armed services around the world, the Collectors Edition library with images of most military related stamps, the Virginia Bader library with samples of limited edition aviation art work, and the Women in Service library, which commemorates the contributions women have made to the military throughout history.

# THE FUNNY FORUMS

Twelve years ago, Doug Pratt had an

idea for a forum. As the author of nine books about adult toys such as model rockets, radio-controlled airplanes and boats, Doug wanted a way to reach these hobbyists quickly and easily without going bankrupt in the process. As Doug explains it, "I wanted to go beyond book writing and reach real people for a change." Seeing that Commodore personal computers were sprouting like weeds in nearly every home and sensing a trend when he saw one, Doug decided to start an online forum strictly devoted to model rockets, airplanes and boats.

Dubbed ModelNet (GO MODELNET), Doug originally pitched this idea to five different online services, eventually choosing CompuServe for their international scope. Doug recalls that one of the highlights in running the ModelNet forum occurred when a team of American hobbyists traveled to Russia for an international radio-controlled airplane contest, and kept Doug and the rest of ModelNet's members informed of the contest results through a local Moscow CompuServe access phone number.

After successfully piloting ModelNet for several years, Doug soon got the chance to become the sysop of the newly opened Comics forum (GO COMICS) after the original sysop quit — and promptly tripled membership within the first year.

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Doug credits his tremendous success to his marketing plan, specifically designed to appeal to the writers and artists of all the popular comic books. To attract these types of comic book professionals, Doug offers them free access to a private message section and library file within the forum. From this enticement, word of mouth quickly spread among Marvel, DC Comics and others in the comic book industry that the Comics forum was the place to network with others in the field or just have a good time chatting with fans.

Doug sums up his success at attracting and retaining new members in one simple sentence, "Make them want to come." He has three suggestions for sysops of both online services and BBSs.

One, make it fun for everyone to visit. In the Comics forum, members regularly exchange messages with their favorite comic book writers and artists, even to the point of suggesting ideas and stories. In return, many of these writers and artists keep their fans updated on the latest projects they're working on long before the general public learns about it.

IIIII

Two, make it easy for visitors to find their way around the forum.

Three, be as friendly (and responsive) as possible, taking care to answer everyone's questions, even if you have to admit that you don't know the answer

Doug also learned that providing plenty of files isn't always the solution to attracting and retaining members

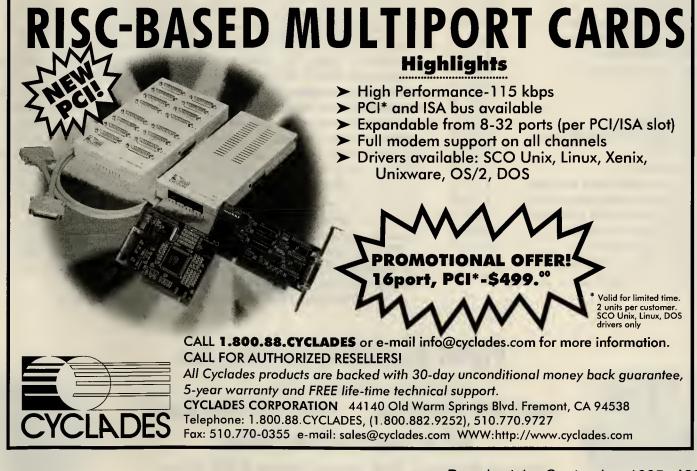
either. While many forums focus on providing tons of shareware files to download, Doug noticed that many people only visit these types of forums when they need something. In comparison,

Doug runs the Comics forum like a comic convention so people will want to visit it as often as possible.

While the Comics forum focuses on comic books, the Funnies forum (GO

FUNFOR), also run by Doug Pratt, focuses on established strips such "Doonesbury," "FoxTrot" and "Baby Blues," undiscovered comic strips that haven't been published yet or aren't getting the attention they deserve, and politi-Filto Kook 95 cal cartoons from Jeff Parker, the cartoonist for Florida Today.

> Both The Comics and the Funnies forums prove that cartoons can be more than just mere entertainment. So the next time your teacher, boss, or parent catches you reading a comic book when you should be doing something else, tell them you're just educating yourself. Given the fact that most Americans only read one book a year, reading a comic book is probably the least of our society's worries these days.



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The IntelliServer is an expandable asynchronous communications server that combines the functionality of a high-performance terminal server with the extended communications capabilities of an Internet access device. It can be connected directly to a TCP/IP Ethernet LAN, and requires no special operating system device drivers. It is actually a compact, self-contained RISC workstation complete with 20MHz MIPS-R3000 compatible CPU, 2-4 MB of RAM, resident multi-tasking operating system, and menu driven interface. The IntelliServer has an impressive list of security and configuration features. Users can be automatically logged onto a specific host, offered a menu of host connections, or given access to the menu and shell. If desired, passwords can be defined for specific users and for administrators. IntelliServer's standard feature list includes full PPP, SLIP, and CSLIP support permitting IP devices to be connected over RS-232 serial ports at up to 200Kbps. This offers an ideal solution for sites that wish to implement cost-effective remote access, Internet access, and LAN-to-LAN connectivity. Each 16 port IntelliServer can be expanded using low cost 8-port and 16-port expansion modules. A single IntelliServer can support 64 physical ports, and up to 32 PPP/SLIP connections. These are ideal to run in conjunction with MajorBBS and Worldgroup by bringing in all users in via TCP/IP. This does not have the load normally associated with polling modems at high speeds.

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Tampa Bay Online

i Weather delays shuttle for second

day, launch set for Tuesday

Goals reveal bolder

conservative agenda

le Edit Jump Page Contents God

Heavy rain, floods wreck havoc in central Florida\*

# PRODIGY DELIVERS HOMETOWN NEWS

Just as the television networks expanded in the 1950s, consumer online services have been in a mad scramble to build mass audiences. Putting newspapers online is part of their strategy to build a large audience. When America Online landed the electronic versions of the New York Times, the Chicago Tribune and the San Jose Mercury-News, it got the prestige that comes with delivering three of the country's best-known newspapers. Having them on the menu gives new arrivals to the online world one more reason to choose AOL and more good material to read when they get there.

File Edit Jump Page Contents

· AP DATELINE

. NEWS BY AREA

COLUMNISTS

BUSINES

. EDITORIAL PAGE

· SPORTS ARENA

SPECIAL REPORTS

· YOUR TOWN

• LOTTERY
• OTHER MED

· WASHINGTON BURERU

monthly rate the way AOL subscribers can browse the Times or the Tribune. And few Prodigy members are going to pony up \$50 a month just to have access to 10 different papers.

But it's an arrangement that benefits the papers. It gives them a revenue stream they can count on. It also frees the papers to stick to what they do best reporting local news. "In a competitive New York media market, we play to our strengths of local news and information," said Kenneth A. Paulson, vice president/executive editor of Gannett Suburban News-papers, in announcing the deal with Prodigy.

ics for The Courier-Journal in Louisville, Ky. His weekly Prodigy, however, is column called Home Tech is distributed to more than 80 newspapers by the Gannett News Service and it's available on the World Wide Web http://iglou .com/gizweb Ric was the founding editor of Plumb and Bulletin Board Systems, two newsletters that covered the

taking a different approach to online newspapers. It has signed up lots of papers - even papers that don't command a national audience. And instead of incorporating the papers into its general information offering, it lets papers carve out a niche on the service that they can have all to themselves — sort of an online service within Prodigy.

The latest arrivals are Tampa Bay Online, a creation of the Tampa Tribune, and On Wisconsin, a service of the Milwaukee Journal-Sentinel. They joined online products produced by the Los Angeles Times, New York Newsday, the Atlanta Journal-Constitution, the Dallas

fee — usually \$4.95 a month.

5 Music critic Philip Booth on Chat Morning News and the 6 Home technology news from Circuit City Providence Journal-Bulletin. dows and Hacintosh users can see photographs Waiting on deck are the Spokane Spokesman-Review and Gannett Suburban Newspapers. Why would newspapers in Spokane, Milwaukee and the New York City suburbs want to be on a national online service? Start with money. Prodigy's newspapers don't have to compete with each other for subscriber attention and the share of connect fees that

That's not a great bargain for Prodigy members who might like to sample news and opinion from different regions. They can't just drop in under their standard

come with it. Each paper has a separate subscription

Both On Wisconsin and DDPPLER TM

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> mind? Share your
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MEWS/OPINION

BAYLIFE ENTERTRINMENT

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NEWS :

ARADE - WFLZ F

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SPORTS

TRRUFI

# MONEY

RP FLORIDE NEWS

Tampa Bay Online stress local news, right down to reports from the burgs and hamlets that ring the cities. If you want to know what's happening in Temple Terrace, FL, or Waukesha, WI, there's a good chance you can find it online.

Both services promote online chats with local personali-

> ties. Among the people who answered questions this summer in On Wisconsin's forum were Milwaukee Brewers President Bud Selig, Wisconsin Governor Tommy Thompson and the lawyer who represented Jeffrey Dahmer.

> Tampa Bay Online offers e-mail connections to reporters and editors, but it also goes beyond the

boundaries of the newspaper to include other media in its online service. WFLA, the NBC affiliate for Tampa and St. Petersburg, provides an electronic representation of its Doppler Weather Radar that paints storm cells on the screen as the "radar beam" sweeps the center of the computer screen. It's a cool idea, but when I checked in, the regional map disappeared just as the radar began its sweep. You could see storm patterns, but you couldn't tell if they were soaking Palmetto or Tarpon Springs.

The TV station's early online offerings emphasized weather with a five-day forecast, current conditions

and Ask the Meterologist column. The station's news department contributed profiles of its anchor persons and promised to post transcripts from its news broadcasts later in the year.

My visit to WFLZ FM's virtual control room was a bit more entertaining. It's the first local media section on Prodigy I've seen that includes links to sites on the World Wide Web. Click on the billboard outside the station's window and it will fire up the Prodigy browser and offer links to Web pages that deal with broadcasting and rock music.

You can click on different parts of the room to produce sound clips of the station's IDs, a list of the current top tunes, a schedule of DJ appearances and profiles and photos of the jocks. If you're not within the range of WELZ, you probably don't care what "Bubba The Love Sponge" looks like. But if you live in the Tampa area, Prodigy is delivering one more way to connect with local celebrities.

# **COMPUTER MAGAZINES SIGN ON**

PC World, a long-time staple on AOL, has also set up shop on Prodigy. So has its sister publication, Multimedia



World. The JUMP words are PCWORLD and MULTI-MEDIA WORLD.

PC World on Prodigy links readers to http://www.pcworld.com - the magazine's Web page. The electronic magazine reproduces most of the magazine's printed features: cover stories, small office reports, Top Of The News and new product reviews. A mouse click also brings up columns such as Help Line, Spreadsheets, Word Processing, Windows 95 Adviser, Online and Star-Dot-Star.

Members can search and browse current and past magazine issues and new content written just for the online edition. They also get access to PC and

multimedia-oriented newsgroups on the Internet and to other related World Wide Web home pages.

# CREDIT UNIONS COME TO PRODIGY

Five credit unions now participate in Prodigy's Money Talk Bulletin Board. The credit unions say they will use Prodigy to educate subscribers about financial offerings and provide advice on loan rates and rates of return on financial instruments.

The participating credit unions are the Patelco Credit Union in San Francisco; San Diego Teachers Credit Union; The Norton Credit Union in San Bernadino, CA; Sunfirst Credit Union, Syracuse, NY; and Superior Credit Union, Collegeville, PA.

# **ERRATA**

In describing some of the home pages created by Prodigy staffers last month, I mistakenly said Glenn Herman's page included links to sites dealing with Virtual Reality Mark-up Language. Prodigy staffer Paul Hrisko is the VRML jock. ◆



# MERICA ONLINE

by Dave Tennant

# FINANCIAL SERVICES, GREETING CARDS AND COMEDY

s of June 1995, America Online passed three million subscribers to become the leader in online services. That may be

the head start AOL needs to stay ahead of the new Microsoft Network, shipping with Windows 95 in August. To keep up with the exponential growth, AOL has modified its organizational structure to include three operating divisions: AOL Services, led by Ted Leonsis; AOL Technologies, led by Mike Connors, and AOL New Enterprises, led by David Cole. The heads of each division will report to AOL President Steve Case, as will Len Leader, who heads Finance and Administration, and Jean Villanueva. who heads Corporate Communications. Global Network Navigator, mentioned in last month's column, will debut soon; it will provide the crucial link between AOL services and the vast offerings of the Internet's World Wide Web. In the meantime, taking advantage of the AOL software upgrade coming to a mailbox near you, many forums (i.e., MTV) are redesigning their areas and are worth a second and third look.

AOL has finally responded to critics who have long complained of AOL's shallow financial service offer-

begin building an invest-

Dave Tennant is

an Economics and

English Instructor in Southern California

He can be reached

on America Online

at "Dtennan" or

on the Internet at dtennan@eis.

calstate.edu

Featuring a mutual fund library, information on 401k's and 403b's, news and tips on investment and retiring, and full brokerage and investment services. the new forum is a welcome addition to AOL's other financial advisors like the Vanguard group.

Keyword Fidelity

and check out editor's selections to become wellversed in trading stocks.

AOL's newest and strongest addition is PC Financial Network (Keyword: PCFN), a full-service brokerage. Members can open an account to trade stocks, put options, study, track, and purchase mutual funds, and control all of their portfolio information. While none of this is new to the online world, AOL has been a little late in providing these types of full services for its members, who can now breathe a sigh of relief and get to trading. PCFN is available now for Windows members, and should be available for Mac members by the time this goes to press.



Online Investor Center

Frequently Asked Questions

# **COMING SOON: YOUR OWN HOME PAGE**

AOL insists it does not want to get caught up in "me too" offerings, but it has a bit of catching up to do. Prodigy announced several months ago that it was going to make personal web page design available to its members and post them. In press statements in late June and a letter from America Online President Steve Case,

AOL announced it is going to introduce "My Home Page," an easy-to-use format that will enable members to create web pages using text, graphics, and photos. The software to create such pages comes from AOL's NaviSoft subsidiary. If the World Wide Web is getting more and more popular, this will make it even more so because users can count on AOL to make making their new web page software easy to use and easy to post.

## **NEW FINANCIAL SERVICES FORUMS**

ings. Questions for the beginner such as "How do I

ment portfolio?" "Why should I maintain a welldiversified portfolio?" or "How often should I review my portfolio?" or, for the experienced investor, "What portion of my portfolio should be in fixed-income securities?" and "What is "dollar cost averaging?" can be answered in the new Fidelity forum (Keyword: FIDELITY).

Morningstar (Keyword: MORNINGSTAR) has improved its look and feel. They have redesigned their forum to make it easier to get quotations, look at the top 10 portfolio holdings, get fee information,



# HALLMARK CARDS

AOL has the perfect solution for people who are constantly embarrassed that they forgot to send just the right card for that special

occasion but chagrined at the thought of having to peruse rows and rows of cards in the local gift shop. Hallmark cards are now available online for perusal. Each card costs \$2.95 plus postage and will be shipped to you or sent directly to that special person. There are featured artists, and cards for special occasions. The cards can be personalized so that you can add your own message and have it printed on the card. Hallmark will mail the card anywhere in the US within 48 hours of receiving the order. Hallmark even uses recycled paper for the environmentally conscious.

Hallmark makes available thumbnail sketches of their cards — in GIF graphics — so members can shop with ease and create their own cards. One of the difficulties they are still working on is that only one card can be ordered at a time, though members can place as many orders as they like. Hallmark insists on up to 10 days now for delivery, but they are working on express delivery. So for the busy person who cannot get away from the terminal ... now you have no excuse.

## **COMEDY FORUMS**

Long ago, AOL had a comedy forum where members could go for a good laugh — check that — many good laughs. This was the place you went to share your best tales with someone else and pick up new material. Over time the forum petered out; either people lost interest or they heard all the jokes.

The keyword: Comedy became the keyword for Comedy Central, a very funny place affiliated with the same Comedy Central on your local cable channel. Here members can download, chat in the Bully Pulpit, post jokes - some very funny, some very racist, and yet



others of the very tasteless variety — and share giggles to guffaws. CC posts schedules of its popular shows, like "Politically Incorrect with Bill Maher," "Mystery Science Theater 3000," "Kids in the Hall," "Absolutely Fabulous," "Whose Line Is It Anyway?" "Stand-Up," "Stand-Up," or classic shows like "Saturday Night Live," "Soap," "Monty Python's Flying Circus," new offerings like "Dr. Katz, Professional Therapist," or "Exit 57" — a new sketch comedy show.

The clips button offers a selection of GIF, WAV and JPEG files of film clips, humorous movie moments, and the like available

for downloading and members can locate the schedules of current and favorite comedians. CC has just a few simple rules:

- 1. Comedy has bite—due to the honesty; it takes a position.
- 2. Comedy has attitude—a skeptical, "show me" attitude.
- 3. Comedy has compassion—stemming from a sense of right and wrong.
- 4. Comedy is intelligent—enough said.
- 5. Comedy tastes like chicken.

For those who are a little more serious about their comedy, AOL has a new forum particularly suited for those in the comedy business. IMPROVisation Online (Keyword: IMPROV) is billed as your connection to the most successful group of comedy clubs in the U.S. and it is "a meeting place for professional comedians, aspiring writers, those who are the life of the party, or those just in search of a good laugh." There is no forum facilitator; it is really just a meeting place of professionals and people who want to break into the business to meet, try out, and share material and information. There is also a list of the Comedy Improv stores nationwide. Now there is not reason to log off AOL without a good laugh! \| \| \|

# SHORTCUTS TO HOT SPOTS ON AOL

In case you have not clicked on the Discover AOL button on the main menu and downloaded this list, here is a copy of the shortcuts that can get you quickly from place to place in AOI

# of the shortcuts that can get you quickly from place to place in AOL. FORUM KEYWORD(S) • American Woodworker ...... wood, woodworker, woodworking • AARP Online ...... aarp • Astronomy Club ...... astronomy

Dolby Audio/Video Forum ..... dolby
 Emergency Response Club .... emergency
 Environmental Forum ..... environment

Gay & Lesbian Forum gay, lesbian
 Genealogy Club genealogy
 Grandstand, The grandstand

Ham Radio Club ham radio
 Issues in Mental Health imh
 Military and Vets Club military

Music Message Center . . . . mmc
 National Academy Of Sciences . nas
 National Space Society . . . . . nss, space

Online Gaming Forums . . . . . gaming, ogf
 Pet Care Club . . . . . . pet care

Photography Forum . . . . . photography, kodak
 Real Estate Online . . . . . real estate, mls, mortgage rates

Rocklink rocklink
 Rockline rockline
 Science Fiction Forum science fiction
 Scuba Club scuba
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# Software Library.



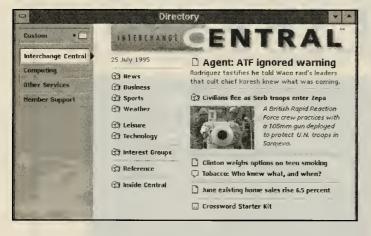


# AT&T/ZIFF-DAVIS INTERCHANGE ONLINE NETWORK

by David Hakala

7e first reported the conception of the Interchange Online Network back in April, 1994. At that time, Interchange was hailed as a major breakthrough. It provided an online publishing platform that mimicked the appearance of print magazines and newspapers. Its Windows-based client software made navigation easier than turning a page. Hyperlinks let one jump from a keyword in an article to indepth related material and back again. One could simultaneously perform a number of tasks, i. e., downloading files while reading/writing mail or searching for articles in databases.

Today, all of the above sounds like one of umpteen thousand Web sites, but Interchange included features more BBS-like than Web-ish. One of the most promising features for us info-junkies was the ability to set up an automatic "clipping service" that would fill one's mailbox at logon with articles containing keywords specified in a "task list." Much to the credit of its parent, Ziff-Davis Communications Co., Interchange's plan included "active communities populated by people with similar interests" (bulletin board systems) right from the start.

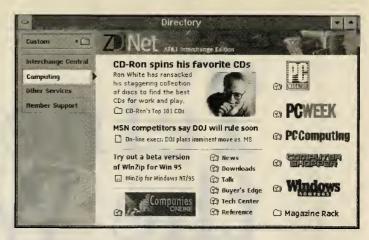


Unfortunately, Z-D never got Interchange out of the beta test stage. AT&T bought the service in February of this year, reportedly for \$50 million — the amount Z-D had sunk into developing Interchange.

On July 17, Interchange was born as a commercial online service.

# WHAT'S ON INTERCHANGE NOW?

Not surprisingly, Ziff-Davis Interactive's ZD/Net is the most richly populated area on Interchange at the moment; it's been there longer than anyone else. ZD/Net provides fulltext access to PCWeek, PC Computing, Windows Sources, Infoworld and hundreds of other business/technology publications. ZiffNet's shareware libraries are here, along with databases of hightech company profiles, public bulletin boards and other services. ZD/Net costs \$9.95 per month including the first five hours of use; additional time costs \$2.95 per hour. Actually, all of the currently available publishers on Interchange charge approximately the same rates.



The Washington Post Co.'s Digital Ink service provides national, international and Washington D. C. news and information. It also includes eight years' worth of archives and advertising databases. Digital Ink goes a bit further than the Star Tribune Online, allowing users to purchase stamps, flowers and other products online.

The Minneapolis-based Star Tribune is the 16th largest daily paper in the U.S. The Star Tribune Online area offers classified ads, fulltext archives going back to 1986, discussion forums where readers can interact with each other and the newspapers' editorial staff, AP and other global newswires. Bob Schafer, Publisher of Star Tribune Online, says the service gained 1,700 users during its 60-day test period, and another 500-800 software kits were still in the mail when we spoke.



Gartner Group, Inc., an information technology advisory service, will be on Interchange by the time you read this, under the name @vantage(tm). Gartner Group normally charges \$10,000 to \$19,000 per year for its highly personalized research and analysis services; corporate VPs and CEOs are its normal fare. Its initial Interchange offering has been targeted at lower-level managers and business units in existing corporate customers, at \$2,000 per year. Around September 1, a schedule of basic services priced at \$40 per month will be available on Interchange.

# INTERCHANGE'S CLIENT/SERVER ARCHITECTURE

Interchange's operations center is in Medford, Massachusetts. It's a distributed network of DEC Alpha computers running TCP/IP. Users log on to Interchange via Sprintnet, making a SLIP/PPP connection. The network supports modem connect speeds up to 14,400 bps, but given the intermittent nature of packet-switched data transmissions, we were not surprised to achieve only 860 cps throughput when downloading files.

The access software is a Windows 3.1 client that includes a TCP/IP stack made by Distinct Software of Saratoga, California — (408)366-8933 voice. The client software comes on three 1.44 Mb disks and occupies over 7 Mb when installed. We had quite a bit of trouble installing the June beta software. It took four tries and a half-hour with one of Interchange's tech support folks (luckily, a tollfree call) to get the thing running. Apparently, this version of the client did not like to share Windows with any other applications, even the Microsoft Office toolbar.

When we got logged on, the July client software upgrade was waiting for us. It was automatically downloaded, the connection was dropped and the upgrade installed and restarted itself. Now that's how things should happen! We have had better luck with this version. We can even load HiJaak Pro (another memory hog) to capture screen-shots while the Interchange client is loaded.

# **WORKING OFFLINE**

The Interchange client is a very effective offline work manager. It includes a "task list" - a set of routines that are automatically run when you log on to Interchange. (See Figure 1.) The task list can be configured by the user to retrieve new mail, help files and client upgrades. Other tasks can update folders containing articles on different topics. If you have written messages offline or tagged any files to be uploaded, these tasks appear on the list too. You can save file descriptions, peruse them offline and request downloads; these tasks also go on your list.

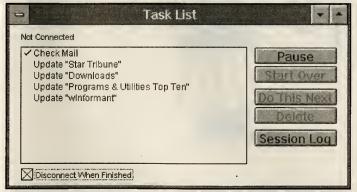


Figure 1: Queuing Tasks Offline Saves Connect Charges

The entire task list can run unattended at preset times and days of the week. The client will log on to Interchange, execute all tasks and log off. Another nice feature is the degree of control you have over the execution of tasks. You can restart the entire task list (in case you lost your connection during a task run), pause a task or move one task from its spot in the list to the "do next" category.

# THE INTERCHANGE BUSINESS MODEL

AT&T does not directly sell access to Interchange. Instead. the various publishers who hang their shingles on Interchange distribute their own customized versions of the Interchange client software to end-users. If you subscribe to

The Washington Post's Digital Ink service, for example, your client program will take you directly to the Digital Ink area of Interchange. From Digital Ink you can access Interchange Central, the "core services" that include member support, billing and transaction services, a number of free news, weather and entertainment services, and access points to other "publishing partners."

This business model is much different from those used by Prodigy, CompuServe, et. al. It gives a publisher the firstscreen limelight spot when users log on. The publishers, who spend their own money to attract subscribers, are not buried multiple levels deep under the marquee of the online mall owner. The publisher is the subscriber's gateway to Interchange, rather than Interchange being a gateway to publishers.

The content providers ("publishing partners," as AT&T calls them) have great flexibility in customizing their areas on Interchange. Within each publisher's area there may be bulletin boards, private mail facilities, chat forums, searchable text databases, file libraries, advertisers' catalogs and orderentry systems. The Minneapolis Star Tribune newspaper's area even plays host to subsystems for non-profit agencies. Again, this model sharply differs from the cookie-cutter prefab forums on other services.

All of the publishers we talked to cited "ownership" of subscribers and design options as one of the chief reasons they chose Interchange. They collect and keep subscriber's billing and demographic data; have direct control of activity logs and content files; and can alter their own menus at will. AT&T provides the software tools, consulting services and network platform for what is effectively a publisher's own hands-on online franchise.

Publishers also like the financial arrangements with AT&T. The revenue split is about 70/30, with the lion's share going to the publisher. A publisher whose subscribers wander off into other publishers' areas gets a "bounty" from the other publishers. Other services keep the majority of connect time fees and pay a forum manager only for time members spend in his/her forum.

# A NEW "BIG BOARD?"

AT&T Interchange offers some exciting alternatives to the other commercial online services. The client software is elegantly and efficiently designed, though it still suffers betastage bugs. The business model for publishers is much more attractive than anything offered by competitors. Full Internet access, including a Web browser, should be available by the end of the year. With AT&T and several of the largest publishers in the U.S. promoting Interchange, we expect it to rapidly grow into a major competitor to CompuServe, AOL, et. al.◆

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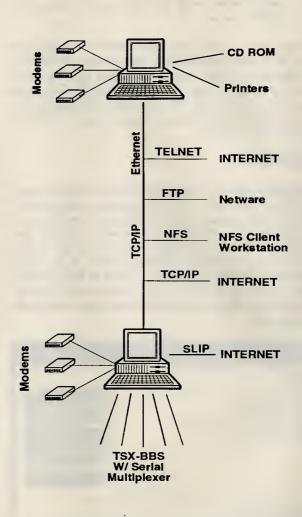
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by David Hakala

# THIS NOTE'S FOR YOU: RARE RECORDS BBS

Music has power — "to soothe the savage breast" or spawn an international online business. Scott Neuman started collecting rare records in 1976, and soon started SNOOP—Scott Neuman's Out Of Print Music company. He specializes in vinyl albums and 45 rpm singles from the '50s to the '90s, but he also does a few CDs. Neuman's built a worldwide network of collectors,

wholesellers and specialty record company contacts that gives him access to over 500,000 titles. Collectors and closet-cleaners send him want-lists and old records for sale. Some of Neuman's clients live in Japan and Russia.

So of course Neuman started a BBS: This Note's For You at (908)505-8420 in Lakehurst, New Jersey. Founded in 1991, the WildCat! system is simple, well focused and populated with over 2,000 registered users. Naturally, musical



Scott Neuman, Music & Car Sysop

topics dominate the forums, but there are also forums for discussions of cars and motorcycles, computer hardware and software, pets, world issues, Star Trek, collectibles and hobbies. The common denominator: these are topics that people tend to be fanatical about, leading to spirited and prolific discussions.

Neuman takes a straightforward approach to creating an online market for music: just post your wantlist in the "Music Wanted" forum and your for-sale list in the "Music for Sale" forum. Neuman says it takes users a lot less connect time to upload a message and give it a pertinent subject than it does to fill out database fields. He publishes a catalog of over 8,000 albums in a set of text files bundled with a freeware viewer program; just download SNOOP094.EXE to see what's currently available. Prices range from \$4 to \$30 per album plus postage.

Revenues come from subscriptions as well as record sales. TNFY provides limited access to all callers, facilitating the core music market message forums. Full access costs \$20 per year and a six-month subscription sells for \$12.

This Note's For You is a solid, classic specialty BBS. It's not trying to be the biggest file library, phone line hunt group or collection of unrelated message

forums in the world. Its 2,000-plus fans share just two phone lines. It does not offer Internet anything. But TNFY has the most important ingredient of all going for its success — a sysop who's fanatical about his theme, attendant to his customers and "always hustling" to please them, as Neuman puts it. That's a more likely profit strategy than throwing up a 64-line megamall and *then* trying to build a business. If you get an online business "right" while it's still small, there's every likelihood that it will stay right as it grows.

Neuman has a "real job" selling cars at Richard's Auto City — and running their *Autoboard BBS* at (908)462-0013 (see our July 1995 issue). General manager Barry Lamb recently turned Neuman loose with a mandate to put Autoboard on the World Wide Web. Neuman says he hasn't a clue where to begin, but he's looking forward to the challenge.

# **BBS-IN-A-BARN: TOLEDO'S BBS**

Sysop Jim Dunmyer is an old friend of the *Boardwatch* family. It was he who convinced Jack Rickard to start our Letters section, after their first meeting at a 1990 FidoNet convention. By that time, Jim had been running a TBBS board at (313)854-6001 for nearly five years, starting with TBBS v1.3 on a Radio Shack TRS-80 Model 3. The BBS served some 400 members of a Toledo, Ohio, area PC users group, who paid "barely enough to cover the phone bills" for the five-line system.

Dunmyer came to Colorado Springs for ONE BBSCON in 1993. There he caught the "Jack and Phil Show" and went home inspired to make his BBS a profitable commercial enterprise. Jim attributes much of his success to the fact that he "did exactly what Jack and Phil said." He found a bank that would give him a Visa/MC merchant account, even though it meant severing a 15-year relationship with



Jim Dunmyer & Toledo's BBS-In-A-Barn

another banker who heard the words "telephone sales," "mail-order," "no storefront" and nothing else. Dunmyer went "just around the corner, to a locally owned county bank" and got his merchant account with no problem. Dunmyer also made Internet e-mail and newsgroups an early priority in his business plan, bringing on these vital attractions before the end of 1993. Initially, he used Jack's PIMP (Personal Internet Mail Processor) and a dialup UUCP feed.

Dunmyer says he deviated from Jack and Phil's recommendations in one respect. "I went for a general-store type of board instead of a specialty niche," he says, "because I'm the kind of person who likes a lot of different people and things in my life." His board attracts teenagers and retirees, conservatives and liberals, "Christian Coalition types" and swingers. The common denominator - the theme that every BBS needs to be distinctive - is diversity and tolerance for different viewpoints. At least two couples have met in Dunmyer's melting pot and gotten married. Dunmyer turns aside complaints from users who think that other users "don't fit in here" with the remark, "Since they obviously got in here, they must fit in here." In nearly ten years, he's booted only one user, a guy who persistently spread misinformation about other users and local businesses. "I thought about that (booting a user) for two days," says Jim, " and decided I didn't need phone calls from somebody's lawyer."

Dunmyer does contract maintenance on industrial equipment, and has a pretty sophisticated workshop in the barn on his property. One day, he brought the Model 3 to the shop to work on its hard drive. Since he already had a phone line in the shop, he decided it was too much trouble to haul the BBS back to the house. Ever since, the BBS has shared the barn with another Dunmyer invention: an auto-feeding, self-regulating woodburning stove that's been running continually for almost ten years. The stove is controlled by a Tandy Color Computer and two sensors of Dunmyer's design. One senses the room temperature, the other monitors the stove's internal heat. "When the room's really cold, we make the stove work harder," explains Dunmyer.

When Dunmyer ordered a T1 line in late 1994, the folks at Sprint were a bit nonplussed to be running it into a "blue barn." But there it sits, connected to an eSoft Internet Protocol Adapter (IPAD) that Dunmyer helped beta test. The IPAD makes Toledo's BBS telnettable at telnet://toltbbs.com and eliminates the need for a router to provide access to http://www.toltbbs.com Windows NT server running O'Reilly and Associates' Website 1.0 software.

Dunmver offers SLIP/PPP dialup accounts to his customers at prices radically different from the schedules offered by most other ISPs. You get unlimited connect time at up to 28.8 Kbps, for a flat fee ranging from \$39.95 per month to \$339.95 per year (\$28.33 per month). No setup fees, no hourly charges. It's an outstanding deal - so good, according to Dunmyer, that a few prospects are reluctant to believe it's true. But there are no hidden "gotchas."

Toledo's BBS is the oldest in the Toledo area and the first to offer sophisticated Internet access. Dunmyer says that was a problem at first; local prospects did not understand the Net well enough to grasp the benefits he was offering. But latecoming competitors (about 14 now) have actually helped educate the market, and there are plenty of customers for everyone.

Dunmyer varies his marketing program and tracks the results. He uses ads in local newspapers, articles written for newsletters, free listings in Computer Shopper and Boardwatch, direct mail campaigns to local businesses and everyone who has called Toledo's BBS in the last ten years. He also offers existing customers incentives for referrals of new customers, an important tactic that ranks alongside Computer Shopper and Boardwatch as the richest source of new customers.

Dunmyer's advice to aspiring infopreneurs is:

- 1. "Naturally, subscribe to Boardwatch."
- 2. "Use TBBS: it's reliable and infinitely versatile."
- 3. "Be prepared to work like never before, unplugging equipment during thunderstorms, sitting up till midnight nursing a sick server, and making it all look easy to your customers."

We asked Jim if he had any parting words of wisdom for our readers; he promptly replied, "Call my BBS!" That's good advice if you want to see how a state-of-the-art BBS/ISP is efficiently managed.

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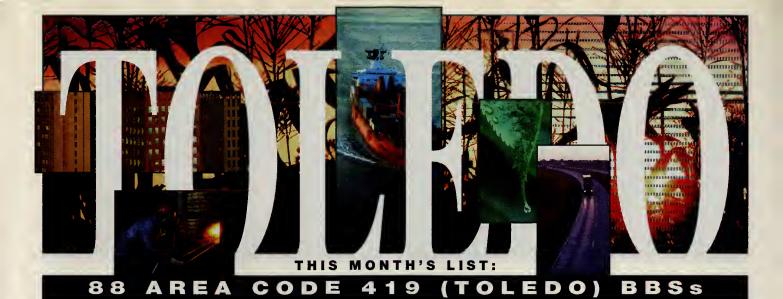
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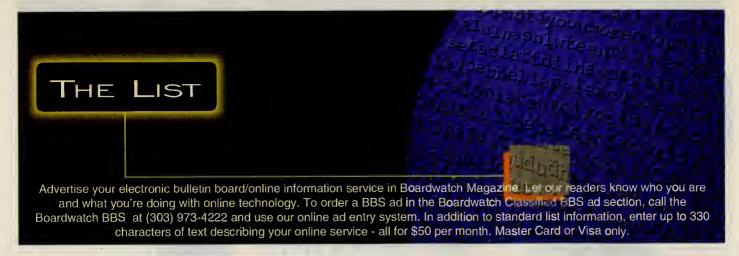
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Jim Dunmyer's Toledo BBS at (313)854-6001 or telnet: //toltbb.com provides this list of Toledo-area boards. Log on to the BBS as firstname=BBS and lastname=LIST to go directly to the list's downloading, updates and text-search menu.



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The Natural Connection BBS (414)426-2110 Oshkosh, Wisconsin. We're working to be the best source of information on nude recreation in America. Learn where to go clothesless on our BBS. We carry lots of files, nudist GIFs and we're Fido, PODs (Pagan/Wicca) and Internet connected. Join clothing-optional America here

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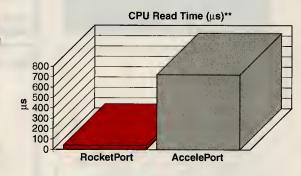
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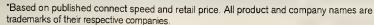
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### VORAK ONLINE by John C. Dvorak

#### FREE INFORMATION AND THE SUPERHIGHWAY

 $\mathbb{R}^{ ext{ecent incidents:}}$ 

1) I'm listening to this radio host doing his computer show. He says that there's a new service on the Web but they'll be charging a fee. He starts a rant: "Who is going to go to use this service when there is so much good stuff on the web that's free!"

2) I'm asked to write something for a large publisher's web page. "Can you do a kind of mini-Inside Track? You know like that column you do in PC Magazine?" I then ask: "What are you going to pay for this?" He says, "Oh, we don't have anything budgeted. I was hoping you'd do it for exposure. That's what the others are doing."

3) Quote seen online: "Why would I want to write for a computer magazine and get paid when I can put all my stuff up on the web for free!"

The last fellow was joking, I hope. The point is that the adage: "You get what you pay for" has some historical and practical meaning. I don't deny that there are plenty of cool freebies and tons of public domain text available on the net and the web. But while broadcast TV is free (and there are plenty of movies and lots of free information being broadcast 24 hours a day), the fact is people still buy books, newspapers, magazines and go to the video store.

Web advocates will immediately make the following McLuhan-esque comment: the only reason that books, magazines, newspapers and video tape stores stay alive is because TV is a linear medium that the user cannot control. The Internet/Web axis is totally controllable. It's as if TV were random access within the time continuum. Imagine taking the TV Guide and punching in a code for last Saturday night's movie. You click on a mouse button and bingo you are watching last Saturday night's movie. Who would need a VCR if you could do that?! Take it a step further and imagine all the TV ever done since 1946 available in the same way. Then add all the movies and whatever else you want into the pot. In some sense this is what is happening with the Internet/Web: random access to history!

When I imagine the potential for what I like to call TOTAL TELEVISION — the complete interactive TV system where users could call up any program from any time - I imagine a world where we'd do nothing but watch TV. This power to watch every Dobie Gillis Show ever made in a self-designed

marathon is too compelling to avoid taking advantage of it (sick thought though that may be). This has happened to some extent on the Web, as selfdescribed Web Heads spend hours on end surfing the Web looking for something nifty to read about or look at. But when they step back and see the benefits of the experience they discover it's not much different than watching 5 years of Dobie Gillis shows. It's a waste of time. Cleaning out your closet is a better thing to do!

OK, now back to the "You get what you pay for" notion. The TOTAL TELEVISION concept has an aspect that can't be ignored. No matter how far back you go there is a pervading shallowness to the information content found on this free medium. Sometimes the entertainment value is high, but the information content is always low and shallow. We all cringe when a dumb friend or relative (we all have a few) makes the comment, "I saw it on TV!" or even, "I read it in the newspaper!" as some sort of irrefutable appeal to authority. Both sources are shallow, misleading and inaccurate much of the time.

Yes, I add newspapers to this complaint. If the computer revolution has done nothing else, it's shown us how shoddy the overall quality of newspaper reporting is. We conclude this after reading our various local newspapers and finding a host of technical errors, naivete, oversights and simplification regarding the reporting of high technology issues. You must logically conclude that ALL reporting is this faulty since everything is based on the same journalistic precepts. These precepts, which generally never worked well, assume that you don't have to know squat about something to report on it. You just have to ask the right questions. Exactly how you can accomplish this "right" questions aspect without expertise mystifies me.

The point is that the newspapers have systematically failed us too and have provided nothing more than background for the shallow TV reports. We are seeing more proof that the "you get what you pay for" axiom is true. Real information costs money, no matter what the propagandists would like to argue. Sure, there is the occasional free source such as Jim Warren's GovAccess, but this is information with an agenda (albeit the agenda is well-meaning). Still, it is anything but objective.

I could begin to belabor this point, but all I want to say is that it's incredibly naive to think that good information - accurate information with depth will ever be consistently free. Information is a

In addition to his weekly syndicated radio call-in show, "Software/Hardtalk," syndicated newspaper columns, magazine writing for MacUser, PC Computing, DEC Professional, Information Technology, and his featured "Inside Track" column in PC Magazine, Dvorak is the author of several best-selling books,including Dvorak's Inside Track to DOS & PC Performance, Dvorak's Guide to PC Telecommunications, and Dvorak's Inside Track to the Mac.

weapon, like it or not. The last free weapons were a rock and a stick. This weapon called information is used by individuals to get an edge on the competition and is used by governments to control the public and win battles. Information is always worth money if it's good information. It's worth even more if it is not generally available. It reaches its maximum value when it's actually secret information.

While some sociologists worry that the world is going to be divided into the information haves and the information have-nots, they ignore the fact that the world has always been divided up this way. The WWW won't help and access to it by the perceived information havenots will do nothing more than fool them into believing they've been empowered when they haven't.

But a world that is divided into the information haves and the information think-they-haves is a lot safer world than a have/have-not world. So who is complaining? The important thing is to make sure YOU know the difference. One way to tell: if it's free information, it's probably NOT what you really want and probably not valuable.

#### DVORAK'S RECIPE NOOK

#### SALSA -**NOTHING TO IT**

 ${f I}$ suppose that you could make your lown ketchup and mayonnaise fresh as needed, but when the kids want a

quick sandwich it's unlikely you want to go through the trouble of making fresh mayo! It's a personal decision regarding how far you want to go to make your own condiments. One that probably should be on the list is salsa. Salsa, which according to some food sources is the number one condiment in the country, is much better fresh and effortless to make. Check the ingredients on your favorite prepared salsa and just copy them. Experiment with different chilies too.

Virtually every ingredient in this recipe can be varied. If you look at the oddball salsa found in today's recipe books you find a huge variety of weird salsa. The Sept. 1994 Sunset (p. 124) exemplifies this trend towards screwy salsa with Tropical Fruit

Salsa which uses pineapple, papaya, mango and bell peppers; Watermelon Salsa which is a combination of watermelon, jicama, jalapenos, cilantro and lime juice. Do you see what we're getting at here? Basically it's making a ground-up cold sauce from just about any combination of things you want. The concept is easy and variety is the key. The idea that there is one perfect salsa or that it can be

bottled is ludicrous.

#### Here's a typical recipe:

One or two tomatoes Two jalapeno peppers Two tomatillos (husk removed of course) Half an onion 1/4 cup cilantro 1/4 cup wine vinegar or lime juice salt, pepper to taste

Coarse grind in a blender, serve in a bowl.

#### Experiment.

Finally, is there a reader who can call some of the BBSs in Argentina and Nicaragua to get me a variety of recipes for Chimichurra sauce - a condiment used over grilled meat. Send them to e-mail://dvorak @aol.com and I'll print the best ones with thanks. This is one tough recipe to find in the literature and I've noticed a horrible shortage of cookbooks that related to South American cuisine.



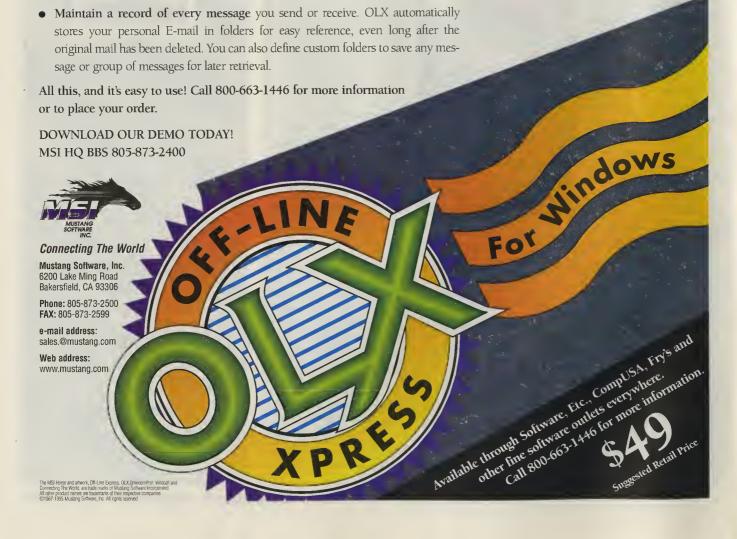
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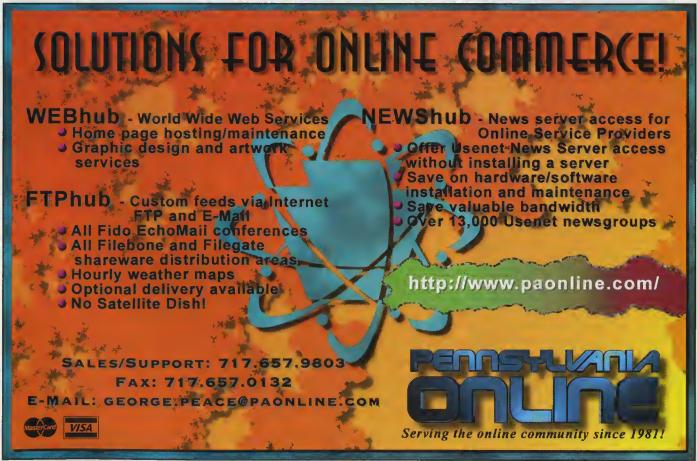
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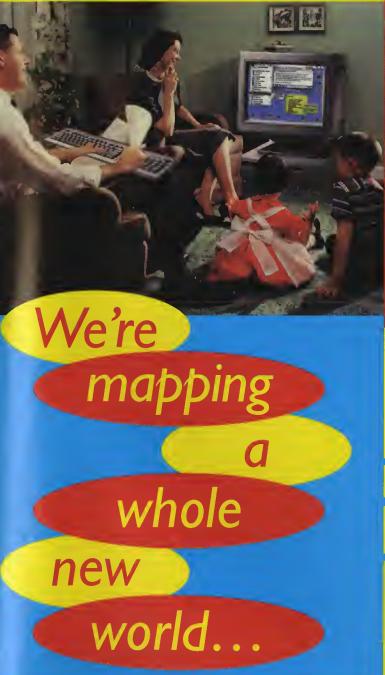
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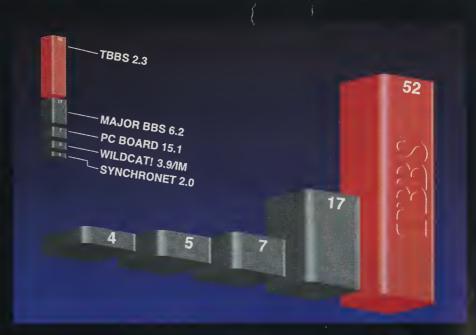




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